THE APPLIED THEORY

OF

ACCOUNTS

BY

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PREFACE

Just before the dawn of the French Revolution, there was, at the Military College of Brienne, a young student whom his classmates called the "Visionary." Never mixing in their noisy pastimes, he would spend hour after hour in his room, drilling tin soldiers on a large table. Dirt, sand, and pieces of glass became hills, fields, and rivers; twigs picked up in the playground were his cannon, while leaves, planted straight in the sand, were to him as forests. His tin soldiers were red or blue; some were mounted, and others, on foot. Night after night, while his comrades slept, the "Visionary" would pitch the blue soldiers against the red; the cannon would roar, and infantry and cavalry, pushed by his thin fingers, would fall dead on the battle-field.

A few years later, when the English fleet blockaded the port of Toulon, and threatened the existence of the Revolutionary Government, the visionary youth, now an officer in the army of France, pitched his "theoretical" knowledge against the "practical" knowledge of men who had grown gray under the soldier's uniform, and to their astonishment, and to the dismay of the invader, he discovered the one strategic point which rendered a battery of artillery so effective as to compel the immediate retirement of the enemy's fleet.

The young officer of artillery knew nothing of warfare but its theory; yet he succeeded where practical strategists had stood in impotent rage. Later, when he became Emperor of the French, it was said of him that his

unequalled knowledge of the theory of artillery operations won his battles before they were fought.

It is the purpose of this book to instruct the student in the principles of accounting, as the practice drills with his tin soldiers instructed Napoleon the First in the principles of war. May the conscientious presentation of these principles of accounts teach the young accountant how to win the bloodless battles of his chosen profession.

Accounting is essentially a militant science; if it remains passive, it must die. To live, it must war incessantly against carelessness, ignorance, inefficiency, evil-disposed cleverness, and, possibly, against dishonesty. Having won, it must rebuild where it has destroyed; but the new structure must be such that it can never again be successfully assailed.

The accountant is a judge to whom appeals are made by the employer against the employee; by the "cestui que trust" against the trustee; by the stockholder against the director; by the director against his associates or against the corporate officers or agents; by the government against violators of fiscal laws; by the trader, the manufacturer, and the financier, against the conclusions to be drawn from their own accounts.

He is also an adviser who must derive from the arithmetical results of books of account, often purposely confused, facts which will enable him to pass judgment upon financial conditions, to guide the judgment of others, to suggest remedies, and to devise means of safeguarding the interests of all parties, whether clients or antagonists. He must be capable of refuting conclusively all assertions which are mere speculation based on supposed or assumed facts which cannot stand the test of accounting analysis; he must be able to defend his ground by submitting proofs so fundamentally correct and so conclusive that they cannot be challenged; he must be so

familiar with the anatomy of accounts that the mere mention of a financial transaction will present to his mind a diagram of the position which the facts to be recorded will occupy in the books, and of the effect which they will have upon facts previously recorded; he must be able to perceive at once the accounting principle involved, and so to apply it as to compel figures to reveal that which they are prone to conceal from the uninitiated.

If it is true that no one can be a great detective who does not know the psychology of the human heart, and that a recruit cannot become an efficient gunner until he has been taught the theory of ballistic curves, it must be true that no one can become an accountant until he has learned the theory of accounts. If one is not so equipped, he may indeed make his way towards practical accounting truth by luck, by intuition, or by plucky determination, but, before he has reached this goal, he has consumed his energy, exhausted the patience of his clients, and too often failed to furnish valuable information at the opportune moment.

The theory of accounts has been evolved from the study of economic and financial conditions, from the development of commercial methods, from careful analysis of the results attained in industries old and new, from the application of the principles expressed by judicial decisions in litigation brought about through business relations, from the doctrines of the law merchant, of the common law, and of modern statutes. It is the outgrowth of centuries; and while its principles are immutable, they are, at the same time, susceptible of different methods of application, which though apparently irreconcilable among themselves, are worthy of consideration on their individual merits.

When about to pass judgment upon the actions of individuals or of nations, we are careful to inquire into

the motives which actuated them; and although we may not be in sympathy with the methods employed, we do not condemn them provided they were adequate to the purpose in hand. But when we come to accounting, we are naturally arbitrary; the purpose is forgotten, and the only question at issue seems to be the nature of the means employed. And yet, the question of adequacy is as vital to accounting as it is to all the undertakings of mankind.

The purpose of the baker of the rural districts of southern Europe, who in common with the majority of his customers is barely able to read and write, is better served by the sticks on which he notches his sales, than it would be by the most handsomely ruled ledger and cash book. Similarly, as the purpose of the small trader of all lands is to keep accounts with his customers and creditors, he need not trouble himself with what has been termed "the only scientific system of keeping accounts" (double entry), since single entry, much abused as it may be, is able to tell him all that he wishes to know, and is much better adapted to his mental equipment. If the merchandise account of a trader reveals the information of which he is in need, why should he heed the indignant protests of philosophers of accounting who tell him that there is really no such thing as a merchandise account, and that the use of complex accounts will rob him of the fruit of his industry, by hiding from him the business truth? And if the purpose of the modest manufacturer of a staple product, the market price of which is as well settled as the demand therefor, is to be as fairly successful as the conditions of his particular industry will permit, why should he be made to sacrifice a good part of his income, in order that he may know through the use of "production factors" or otherwise, the cost of every atom of the product which he manufactures?

It has been asserted repeatedly that it is impossible to bring together ten accountants whose views will harmonize on any given topic of their profession. This will always be true to a greater or less extent, since the human mind is not adapted to the acceptance of a single standard of truth. But these divergent views will become largely harmonized just as soon as it is realized that if a student of surgery cannot be trusted with an operation until he has mastered the anatomy of the human body, the student of accounting cannot be trusted with the finances of a business until he has mastered the theory of accounts.

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The Applied Theory of Accounts

Part I—Business Organization

CHAPTER I

THE COPARTNERSHIP

Preliminary

The study of the theory of accounts presupposes a good working knowledge of the laws which regulate business—whether conducted by individuals, by associations of interest known as copartnerships, or by artificial bodies created by law, and known as corporations—as well as of the principles of corporation finance. But as it might be considered far too optimistic to assume that every student, or would-be student, of accounting is thus equipped, a brief sketch of the legal characteristics of the several types of business organization is given here.

Sole Proprietorship

The business rights and privileges of the individual seeking wealth independently, are affected only by such laws and customs as regulate the ordinary relations of men with their fellow-men and with governing bodies. Outside of such legal steps as every sole proprietor must take to register his business and to comply with local police and fiscal regulations, he is at liberty to conduct his enterprise as he pleases, provided he does not interfere with the rights of others, or with public policy. As to

partnerships and corporations, their activities, through law and time-honored customs, have become subject to restrictions which act for the benefit and welfare of their members, as well as of outsiders who deal with them.

The Copartnership

An association of men in partnership is thus defined by Chancellor Kent: "A contract of two or more competent persons to place their money, effects, labor, and skill, or some or all of them, in lawful commerce and business, and to divide the profits and bear the losses in certain proportions."

In the Federal courts a copartnership has been spoken of as, "A contract of mutual agency, each partner acting as a principal in his own behalf, and as an agent for his copartners."*

There are two broad classes of partnerships:

1. General Partnerships
2. Limited Partnerships

As accountants generally understand the term, a general partnership is one in which all the partners are tenants in common, every member sharing with his associates the liability for such debts as the firm has incurred through the actions of the individual partners as agents of the other members. The law of New York says: "Every general partner is an agent of the partnership in the transaction of business, and has authority to do whatever is necessary to carry on the business in the ordinary manner."

Limited Partnerships

As distinguished from general partnerships, the limited partnership is characterized by the inability of

* Farrick v. Harman, 168 U. S. 324, 328; 18 C. St. 135; 42 L. Ed. 484.

some of its members to act as agents for the others or to have any voice whatsoever in the management of the business; and also by the limitation of the liability of such members to the amounts of the capital contributed by them.

In some states, all the members of a limited partnership are liable only to the extent of the capital which they have contributed; but in general, limited partnerships must have at least one general partner who is liable for any deficiency in the assets available for the liquidation of the partnership liabilities.

The members of a partnership who enjoy the privilege of limited liability are referred to as "special partners." A peculiarity of their status is that they must contribute capital to become partners, while general partners are not legally bound to contribute anything. In many states, the statutes even require special partners to contribute "cash," or "lawful money of the United States."

The most important of the restrictions to which special partners are subject, is that which prohibits them from withdrawing their capital in the form of dividends, profits, loans, or salaries, etc. If they do so, they forfeit the privilege of limitation, and become liable as general partners. Further, when at dissolution of the partnership the assets are not sufficient to liquidate the liabilities, special partners are, in some states, denied the right of sharing in the firm's assets.

Limited partnerships may have members who while enjoying limited liability, are permitted to have a voice in the management of the concern. They are called "dormant partners." Their connection with the concern must at all times remain secret, or they lose the privilege of limited liability.

An important distinction between limited and general

partnership is, that as soon as insolvency is ascertained an injunction may, upon the application of a creditor, be obtained against a limited partnership and a receiver appointed; whereas, in general partnerships a creditor has no such equitable remedy unless it is shown that by allowing the firm to continue, his interest would be grievously injured through mismanagement. While this remedy has sometimes been granted to the creditors of a general copartnership, it is not generally thought to belong to them by right.

Nominal Partners

A nominal partner is one who, while not in fact a partner of either a general or limited partnership, holds himself out to be such, to the prejudice of an innocent third party. If the injured party seeks redress, the law makes the nominal partner a general partner for the purpose of the particular litigation, and attaches upon him a general liability.

Articles of Copartnership

In partnerships, whether general or limited, the partners are usually bound by a written agreement, known as "Articles of Copartnership," which purports to regulate the actions of the associates, to set forth their duties, rights, and privileges, and to define the scope of the enterprise. And since copartnerships may be terminated otherwise than through insolvency and bankruptcy, by: (1) the expiration of the term for which created; (2) mutual consent; (3) the death of one of the partners; (4) the transfer by a partner of his interest to third persons not partners; (5) the contemplated admission of a new partner not satisfactory to all the others; and (6) the retirement of one of the partners, it follows that articles of partnership, in order to be well drawn, should attempt

to foresee, and to provide for, the conditions which may prevail at dissolution.

The Accountant's Duty

It is, however, because articles of copartnership are seldom thorough, far-seeing, and clearly expressed, that accountants are so often called upon to minister to the partnership about to be dissolved, and to certify to, or deny, the supposed justice of the claims made by one partner against the others. The duty of the accountant is to conform to the spirit of the articles binding the partners; or, if this be impossible, to interpret the provisions thereof in the sense in which the questions at issue are generally understood by similar types of business association; or this, in turn, failing, to seek the assistance of the law of partnership, of which the salient points are given below.

The Partnership a Quasi-Legal Entity

While it is generally understood that partnerships are not legal entities, still it seems to be in line with modern ideas to consider them as such. Courts of law have referred to them as "The ideal being, known as the partnership"; the United States Bankruptcy Act appears to consider them as entities capable of being thrown into bankruptcy, although the individual partners may not be. In stating accounts before a master or a referee, or in cases of litigation between partners, it is customary to open an account with the firm; this account is debited with the contributions of the partners (but not with the amount paid by one partner to another partner personally, for a place in the firm) and with all moneys advanced by the partners to the firm or spent by them for the benefit of the firm as such.

Acquisition of Partnership Property

Everything which the partners contribute in the form of capital, either at the incipiency of their relation with one another, or subsequently, is considered as property of the firm as a whole.

Although oral agreements may in some cases be deemed valid, it appears to be the rule that real property owned by a prospective partner, becomes firm property only by virtue of a written contract transferring the interest in the land estate from the individual to the firm. But when real estate has been acquired with the funds and for the purposes of the firm, it is the property of the firm, even though the title is in the name of one of the partners and there is nothing but a verbal agreement to the effect that it was to become the firm's property.

Partners' Debts

The debts contracted by individual partners, either before or during the life of the partnership, may become debts of the firm by mutual consent.

General Partnership Rules

Unless specific provisions to the contrary are inserted in the articles of copartnership, or some fact exists tending to show that the partners intended it otherwise, the following rules prevail:

1. All advances made by individual partners to the firm, and all debts incurred by them for the partnership, are loans to the copartnership, and make the partners so contributing, creditors of the same. As creditors, they are entitled to interest on their advances and on such sums as they have paid personally for the benefit of the firm as such.

2. Interest is not to be credited on the amount of capital invested, even though the capital contribution of one of the partners is greatly in excess of that of others.

3. Interest is not to be charged on withdrawals. If, however, the amounts withdrawn by a partner are in excess of the limit allowed, fairness requires that he shall be charged with the interest which he has caused the firm to lose.

4. Interest is not to be charged on moneys remaining in the possession of a partner pending dissolution and winding up.

5. If no rate of interest is mentioned, the legal rate prevails whenever transactions occur raising the question of interest.

6. Profits and losses are to be shared equally, no matter how unequal the capital accounts of the partners may be.

7. Partners are not entitled to compensation for their services.

8. All partners have an equal duty to keep books of account, each partner having free access thereto.

Precedence of Claims Against Partnership

While it is true that an individual partner who has advanced money to the partnership or expended his own money for its benefit, is a creditor of the firm, his claims, nevertheless, rank after those of the outside creditors of the concern; but they rank before the claims of the private creditors of his copartners.

An undrawn credit account appearing in the books of a firm to the benefit of one of the partners, is not to be considered as his private or separate estate in case of dissolution of the copartnership, until the firm's debts have been paid. This is all the more essential because individual

creditors of a partner appear to have a preferred equity in the separate estate of that partner over the creditors of the firm.

Value of the Good-Will

While numerous court decisions indicate that a surviving partner has the right to continue to use the firm's name, it seems to be a generally accepted doctrine that if the good-will attaching to the name is truly existent and has a value, the surviving partner is not entitled to use it without compensation to the estate of the deceased. In some cases the courts have even gone so far as to say that the basis for computing the value of the good-will which the firm's name conveys, should be the annual profits of the business prior to the death of the partner.*

Partnership Paper

If negotiable paper is within the scope of the firm's business any one member may issue it; if not within the scope its issue must be ratified by the other members or it is not binding upon the firm. The same is true of accommodation paper, guaranty, and suretyship.

Status of Retiring Partners

If a retiring partner gives his ex-partners an unconditional contract of sale, he retains no lien against the partnership assets. If the sale is conditional upon specific performances he retains a claim upon the assets available for distribution to the firm's creditors.

All obligations incurred by a firm, or binding upon partners who were members at the time of their incurrence, are binding upon any such members who retire before these obligations are satisfied, even though they

* Matter of Silkman, 121 N. Y. App. Div. 202; 105 N. Y. Suppl. 872; affirmed in 190 N. Y.; 560 N. E.

have not matured at the time of such retirement. This holds true even though the partners who purchase the interests of those who retire have agreed to liquidate the liabilities, and have given the vendors an indemnity bond against any liability for the firm's debts. The law considers retiring partners as sureties for the debts incurred while they were of the firm, and considers the bond as an indemnity against losses, and not as a covenant against liability to suit.*

Status of Continuing Partners

The continuing partners are liable for the debts of the old firm, jointly with the retiring partners. If a new firm has been organized it is not liable unless by agreement to become so, or unless it performs some act indicating that it intended to hold itself liable.

Status of Incoming Partners

Partners coming in after the retirement of other partners, become liable for the debts of the old firm only if they agree to undertake such liability, or if they perform an act indicating such intent. And it may be considered that they agree to become so liable if, upon entering the firm, they fail to state their freedom from such liability.

* Taliaferro *v.* Brown, 11 Alabama 702.

CHAPTER II

THE CORPORATION—STOCK SECURITIES

The Corporation Defined

Chief Justice Marshall thus defines a corporation:* "An artificial being, invisible, intangible, and existing only in contemplation of law. Being the mere creature of law, it possesses only those properties which the charter of its creation confers upon it, either expressly or as incidental to its very existence. These are such as are supposed best calculated to effect the object for which it was created. Among the most important are immortality, and if the expression may be allowed, individuality; properties by which a perpetual succession of many persons are considered as the same, and may act as a single individual. They enable a corporation to manage its own affairs, and to hold property without the perplexing intricacies, and the hazardous and endless necessities of perpetual conveyances for the purpose of transmitting it from hand to hand. It is chiefly for the purpose of clothing bodies of men, in succession, with these qualities and capacities, that corporations were invented, and are in use."

Corporations Classified

Corporations may be divided into stock corporations and non-stock corporations. Non-stock corporations include all chartered associations whose purpose is idealistic, religious, charitable, educational, etc., etc.

* Dartmouth College v. Woodward, (4 Wheat) U. S. 518-636; 4 L. Ed. 629.

Stock corporations are frequently divided into:

1. Financial Corporations
2. Business Corporations
3. Public Service Corporations

To fulfil the purpose for which they are created, corporations require capital; this is either contributed by individuals, copartnerships, or other corporations, or is borrowed; or it may be obtained by both these methods.

Shares, Capital, and Capital Stock

To show to what extent individual contributors are interested in the wealth of the corporation by virtue of their respective contributions, "shares of capital stock" are issued to them, having a "par" or nominal value, the minimum of which is fixed by statute, the maximum being uniformly $100. In the State of New York it is now legal to issue common stock without a par value, and preferred stock which has no preference as to principal, may also be issued without par value.*

The capital contributed by interested parties is the property of the legal entity known as the corporation, while the shares of stock are the personal property of their holders, and constitute a liability of the corporation. Thus, when we refer to the "capital" of a corporation we mean the difference between the assets into which the contributions of capital have been converted, and the liabilities to outsiders incurred as a result of the activities of the corporate being; but when we refer to "capital stock" we mean the actual liability of the company to shareholders for the capital paid in, or subscribed and bound under the law to be paid in; and in addition the "potential stock," that is to say the power given by the

* See Chapter 351 of the laws of New York, 1912, "An act to amend the stock corporation law in relation to corporations having shares of capital stock without nominal or par value."

charter to obtain more capital by incurring a liability to stockholders to the full extent of the unissued, but authorized capitalization.

Dividends

The profits made by the corporation through the employment of the capital contributed by the shareholders, belong to the latter only after the board of directors has resolved that they shall be distributed as dividends and the resolution has become known outside of the board room. When these conditions concur, dividends become debts of the corporation, and the shareholders can enforce their payment. In business corporations it is customary to separate the capital stock and profits by calling the latter "surplus." Banks and financial institutions, however, frequently refer to the two items as one, "capital and surplus." This is due to the fact that the surplus of banks is usually considered as part of the capital stock and that the transfer or the bequest of bank stock is understood to carry with it the surplus earned which has not been separated therefrom by the declarations of dividends.

Kinds of Stock and Its Issue

The capital stock of corporations is usually divided into two classes, common and preferred. Common stock is that which has no financial preference over any other stock of the company and is generally that to which is given the voting power. It confers upon its holders the right to participate in the management of the affairs of the company through the annual election of a board of trustees, or directors, who are to act for the stockholders at large.

The word "preferred," when applied to stock, means that the stock is entitled to first consideration in the dis-

tribution of profits and assets, either or both, as the case may be. Preferred stock may be cumulative as to dividends; it may or it may not have voting power, be redeemable at a certain figure on or before a stated period, or be convertible into bonds of the corporation. If part of the original organization scheme, the issue of preferred stock requires no authorization on the part of the common stockholders; but if it is to be issued after the rights of the common stockholders have been established, it requires their authorization.

Corporate capital stock is issued in exchange for a consideration, the nature of which varies according to the statutes of individual states, but which may be said to be, in the majority of the states:

(1) Cash or its equivalent, the latter term including subscriptions subject to call.

(2) Property, the valuation of which it is within the power of the board of directors to establish.

(3) Labor or services.

Stock Subscriptions

Generally speaking, unconditional subscriptions to capital stock bind the subscribers, i.e., they can be enforced; the issue of certificates of stock upon the strength of a subscription agreement, completes the stockholder's liability, and he is bound to pay that which he has promised to pay. This liability of the stockholder is enforceable by the company itself, or by its creditors after insolvency. Courts have held that unless particular statutes provide to the contrary, "it is not essential that a certificate should have been issued, in order to create the relation of shareholder, provided a contract to take the stock has been duly made."

It is said that the form of subscription is immaterial,

so long as the intention of the parties can be ascertained; but in cases where the statutes require that a certain per cent of the subscriptions be paid in cash upon subscribing, such a payment must be made before the subscription agreement becomes binding.

Capital stock to which a prospective stockholder has subscribed, but for which he has not paid, can be declared forfeited only if the statutes of the state in which the corporation was created, specifically grant the power of forfeiture. Even then, the exercise of this corporate right should be for the benefit of the corporation, and not for that of the stockholders. And this right can be exercised only by the board of directors. If the statutes do not provide for forfeiture, the existence of a provision to that effect in the by-laws of the company is invalid.

The acceptance by a corporation of a subscription to its capital stock, makes the subscriber a stockholder of the company. Bona fide purchasers of capital stock which bears on the face of its certificate a notice that it is fully paid, are not liable either to the corporation or to its creditors for any amount thereof which might, in truth, be unpaid.

Property Acquired by Stock Issue

The law of New York says in regard to the matter of consideration for stock, that any corporation authorized by its charter to purchase property for its use and lawful purposes, may issue full-paid non-assessable stock for the value of the said property, and that in the absence of fraud, the judgment of the directors in regard to the value of the property thus acquired shall be conclusive. It also requires that whenever a corporation reports on its capital stock in compliance with legal provisions, it shall specify what amount of stock was issued for property. Unless prohibited by statute, corporations may acquire property

by paying therefor partially in stock and partially in bonds and partially in cash.

Labor or Services as a Consideration

Labor is thought to include manual or brain labor contributed by contractors, lawyers, financial interests, etc., etc., for the benefit of the corporation, and anything which the corporation receives in the line of services for which it would have to pay. Under this interpretation of the law, it would be possible to issue stock for organization expenses, for alterations to buildings, for the particular services rendered by underwriters of corporate stocks and bonds, etc., etc.

Stock Bonuses—Increase or Decrease of Capital Stock

In general, it is held that a corporation cannot issue its shares to its stockholders as a bonus; but in the State of New York the issue of unissued stock as a bonus to bondholders has been upheld as proper, since it was necessary to the successful flotation of bonds.* The Supreme Court of the United States has corroborated the soundness of this principle to the extent of a decision to the effect that where a bondholder had obtained stock as consideration for his purchase of bonds at par, he could not be made to pay for the stock, provided the par value of the bonds was greater than the actual value of the bonds and stocks.†

Capital stock may be increased beyond the issue originally authorized, by compliance with the requirements of the state statutes. It may be similarly decreased, but there is often a statutory provision that the reduced capital stock shall at least equal the debts of the corporation.

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* Christensen *v.* Eno, 106 N. Y. 97; 12 N. E. 648; 8 N. Y. St. 682; 60 Am. Rep. 429.

† Handley *v.* Stutz, 139 U. S. 417; 11 S. Ct. 530.

The statutes of individual states must be consulted in regard to what constitutes the proper legal steps necessary to obtain the authorization to increase or decrease the capital stock.

Borrowed Capital—Corporate Bonds

While the issue of long-time instruments of credit is not a prerogative which only corporations enjoy, bonds are almost exclusively issued by corporate bodies. Unlike stock, they promise to pay a certain sum of principal and a certain sum of interest at specified times; and, unlike stock, they give their holders the privilege of asserting their rights whenever that which they are entitled to has not been received. But since this right of the bondholders appears to place in jeopardy the preëxisting rights of stockholders, many states require that all issues of bonds be authorized by a two-thirds vote of the stockholders.

Bonds are, generally speaking, long-time promissory notes bearing interest at a stated rate, issued serially in units of like denomination, payable to bearer or to a person registered on the books of the company issuing them, pledging to the aggregate of the bondholders certain specific properties described cursorily in the note itself, and in full detail in the contract which gives the trustee the right to sell the pledge for the benefit of the holders of the notes if either principal or interest is defaulted at maturity.

Classification of Bonds as to Security

There are, however, certain classes of bonds which may or may not pledge property to secure the principal of the note, and which pledge no property whatever to secure the interest. Bonds may thus be divided into three general classes:

1. Secured Bonds
    a. Pledging personal property
    b. Pledging real property
    c. Pledging both real and personal property
2. Partly Secured Bonds
    a. Unsecured as to interest but
       Secured or preferred as to principal
3. Unsecured Bonds both as to principal and as to interest

1. Secured Bonds

a. Pledging Personal Property:

(1) Debenture Bonds of Financial Institutions. These bonds pledge first mortgages owned by the company which issues the instruments of credit. The rate of interest which these bonds carry is, of course, less than the borrowing company obtains on its own investments in first mortgages.

(2) Collateral Trust Bonds. The pledge in this case consists of personal property, such as stocks, bonds, mortgages, etc., owned by the borrowing company, and placed by it in the hands of a trustee, in accordance with the terms of a contract which provides for the sale of the pledge for the benefit of the bondholders, upon default by the borrower of either principal or interest.

(3) Equipment Bonds. Until recent years, the form of these bonds did not vary materially from that of other bonds. They were issued for periods running from ten to fifteen years, and were repayable in total at maturity. They pledged the very equipment for the acquisition of which they had been issued. Lately these bonds have assumed a character which places them in a class by themselves. They are known as "Car Trust" or "Equipment Trust Certificates." They are frequently repayable in instalments, the security pledged under the issue as a whole

reverting, after payment of each instalment, to the unretired proportion. The equipment pledged by the indenture is earmarked individually by means of a plate bearing the name of the trustee in whom title rests until payment of all the obligations under the issue. When repayable in instalments, they are issued in series marked "A," "B," "C," etc.

b. Pledging Real Property:

(1) Real Estate Bonds. When issued by public service corporations, these bonds are secured by such parcels of real estate as are not required for the operations of the company. When issued by other companies, the above distinction does not necessarily apply.

(2) Land Grant Bonds. The pledge, under these instruments of credit, is the landed estate which common carriers receive sometimes as a donation, either from the government, from municipalities, or from large business interests, in consideration of the value of the public services which they render.

(3) Terminal Bonds. These pledge the land and the buildings which constitute what is generally known as the "terminal facilities" of transportation companies.

c. Pledging Both Real and Personal Property:

(1) General Mortgage Bonds. They offer as a security the whole physical property of the company, present or to come, whether real or personal.

(2) Blanket Mortgage Bonds. They cover the whole property of a railroad system, subject to such prior liens as attach to parts thereof. If they contain specific provisions compelling the retirement of prior liens at maturity, they, in time, become first mortgages; otherwise, not.

(3) Divisional Bonds. These are special to railroads which, in the course of their development, have absorbed

other lines now forming subdivisions of the system as a whole. The bonds which mortgaged the property at the time of its absorption by the greater system, are known as "divisional."

(4) Purchase Money Mortgage Bonds. These bonds pledge the very property for the partial payment of which they were issued.

2. Partly Secured Bonds

a. Income Bonds. The mortgage recites, either that there is pledged some specific property as a security for the repayment of the principal, or merely that the bonds constitute a preference claim on the property of the company. As to the interest on the bonds, its payment depends entirely upon the existence of net profits; if net profits do not exist in any given period, the right of the bondholders may or may not cumulate, according to the terms of the indenture.

3. Unsecured Bonds

a. Railroad Debentures. These bonds are nothing more than a formal acknowledgment of a debt, under seal. In regard to the interest payable thereunder, they present the same general characteristics as income bonds.

Typical Bond Issues

In regard to their ultimate disposition, bonds are often referred to as "redeemable" and "convertible," while the names borne by certain other bonds indicate that they came into existence as a result of financing operations the nature of which is shown by the title appended to the instruments. To the latter category belong, consolidated bonds, refunding bonds, and interest bonds.

Redeemable bonds can be repaid by the company liable under them, at the end of a period shorter than the

life indicated on their face. The right of redemption before maturity belongs to the maker, and not to the bondholder.

Bonds are said to be convertible when, according to the terms of the indenture, they can be exchanged, at the option of the holder issuing them, for some other form of obligation, such, for instance, as preferred stock.

An issue of consolidated bonds takes the place of several prior issues, and consolidates the pledges given as a security for the individual issues to be retired.

Refunding bonds, as their name indicates, are issued in lieu of maturing obligations; they may either be exchanged for the maturing bonds, or sold in order that the proceeds may be applied to the retirement of the obligations. In either case, the same property is pledged as applied to the redeemed instruments.

Interest bonds, as their name suggests, are issued in payment of interest obligations maturing under other bonds which cannot be met otherwise.

Bonds may carry as many interest coupons as there are interest periods during their life, or they may carry no coupons at all. In the first instance, they are called coupon bonds; in the second instance, they are known as registered bonds.

CHAPTER III

THE CORPORATION—ORGANIZATION AND MANAGEMENT

Corporate By-Laws

As it would be manifestly impossible for the stockholders to manage the affairs of the corporation, and as, besides, they are not recognized by law as agents of the corporate body, they elect a board of directors whose duty it is to manage the corporate affairs. This board exercises its functions by appointing officers to whom it delegates part of its powers; and in order that the rights and duties of all may be well defined and understood, by-laws are enacted which, in so far as they do not conflict with the laws of the land, are the laws regulating the relations of the stockholders with the directors, of the directors with the stockholders and officers, and in some cases of the corporation with outsiders who have knowledge of the existence and import of the by-laws and are thus supposed to accept their validity. Unless vested in the board of directors by the statutes of the particular state in which the corporation is formed, or by the charter of the corporation, the right to make by-laws belongs to the stockholders.

The Board of Directors

Speaking generally, after the stockholders have elected a board of directors, they cannot act otherwise than through that board; and in the absence of restricting by-

laws the board has practically the same powers as the corporation. Directors do not, however, possess the right to encroach upon powers that have been given to stockholders by statute, such, for instance, as the right to remove a director, to increase or decrease capital stock, to dissolve the company, etc. They cannot, unless authorized by statute, amend by-laws, or make, without consent of the stockholders, any change in the authorized capital stock of the company. If the corporation has that power, the directors may direct the purchase of the company's capital stock in the open market, and hold it in the treasury subject to resale, but they cannot order it canceled; they must hold it unextinguished. They cannot cancel subscriptions to stock without consent of the stockholders; issue more stock than is authorized; execute leases which amount practically to divesting the corporation of its physical assets; issue stock for less than par, unless the statutes permit of the contrary; declare unlawful dividends, or vote by proxy at meetings of the directors.

The directors possess the power to borrow money and to pledge therefor the assets of the company, except when the by-laws prohibit it; to create new debts to pay off old debts; to lease corporate property if such lease does not deprive the corporation of the power to conduct its own business; to use their discretion as to the extent of the dividends to be paid out of the surplus earned; to conduct corporate litigation at the expense of the corporation; to ratify a debt which has been barred by the statute of limitation; to make and transfer negotiable paper; to fix the salaries of the corporate officers; to pay wages in advance; and, unless prevented by the corporate by-laws, to make contracts for periods of one year or more, with persons who have services to hire or to sell.

Courts of equity are prone to consider directors as the trustees of the stockholders as well as of the creditors of the corporation. This gives to their functions a fiduciary character which places them in a position where they may not secure for themselves any advantage which the stockholders cannot share, or which would cause the rights of the creditors to become inferior to theirs. It has even been held that a director who acquires for himself property which it was his duty to acquire for the corporation, holds it as a trustee for the corporation precisely as if he had acquired property belonging to the corporation.*

Stockholders

Stockholders have the common-law right to make the by-laws of the corporation. In some states the statutes delegate the right to the board of directors. They may insist upon certificates of stock being issued to them as evidence of the liability which the corporate entity has contracted towards them. In some states they are authorized to issue preferred stock by appropriate procedure. They have a common-law right to inspect the records of the company, but this has been restricted by statute and by the courts, and usually a good reason for such inspection must be shown. A stockholder has the right to subscribe to his due proportion of all increases of capital stock. Unless the statutes or the by-laws of the company specifically authorize mortgages by a vote of the directorate, the directors cannot jeopardize the rights of the stockholders by issuing such obligations without the authorization of at least two-thirds of the stockholders assembled at a special meeting.

In the event of insolvency the stockholders are liable for the difference between that which they have paid, and that which they should have paid to make their stock

* Robinson v. Jewett, 116 N. Y. 40; 22 N. E. 224.

"full-paid," even though the company had agreed to accept the payments made as full consideration.

Corporate Officers

The number, the titles, and the powers of the corporate officers, vary materially according to the importance and to the internal organization of corporations. They are, usually: the president, one or several vice-presidents, the secretary, the treasurer, and the auditor.

The President. In corporations in which the board of directors is active, the president exercises merely the functions of an officer presiding over the deliberations of that body, and of the meetings of stockholders. In corporations where the board is inactive, the president has the power of a general agent of the corporation. The nature of this power depends upon the character of the particular enterprise, and upon business custom.

The Vice-President. This officer has, at law, no special function or power, except when taking the place of the president. Corporate by-laws may, however, render his office active and important.

The Secretary. The duties and importance of the secretary's office is determined by the corporate by-laws. Generally speaking, he signs certificates of stock, keeps the corporate seal and the corporate records, reports the deliberations of the board of directors and of the meetings of stockholders. He signs or attests, or both, all sealed instruments of the corporation, and issues all official notices of meetings.

The Treasurer. As the name indicates, the treasurer has charge of the corporate finances. He usually has the power to sign checks, to select depositories when the board has not acted, and to sign jointly with the president, or other officer, all instruments pertaining to finances.

The Auditor. This officer has charge of all matters pertaining to the keeping of the financial records. He plans books of account, devises methods of recording and accounting best calculated to fulfil the purpose of the company, and watches over the faithful recording of all facts. He submits, at stated periods, statements showing the financial status of the enterprise, and the causes which have contributed to its success or to its failure.

CHAPTER IV

THE CORPORATE RECORDS

Statutory Requirements

The financial records which a concern may keep—whether partnership or corporation—will be considered at length in the course of this book. But inasmuch as the corporate books have little to do with accounting principles, it may be well to treat of them at this point.

The requirements in regard to the number and form of corporate books vary greatly in the different states. Generally speaking, it may be said that the scheme of corporate accounting comprises:

1. Minute Book
2. Subscription Ledger
3. Stock Certificate Book
4. Stock Book or Stock Ledger
5. Corporate or Stock Journal
6. Stock Transfer Book

1. Minute Book

The minute book should record the facts in connection with the organization of the company, the framing and the amendment of the by-laws, the election of the directors, the appointment of officers and ministerial agents, and a true history of the meetings, deliberations, and resolutions of the board of directors and of the stockholders. The facts recorded should be expressed in clear, unequivocal language. The book is usually kept by the secretary of

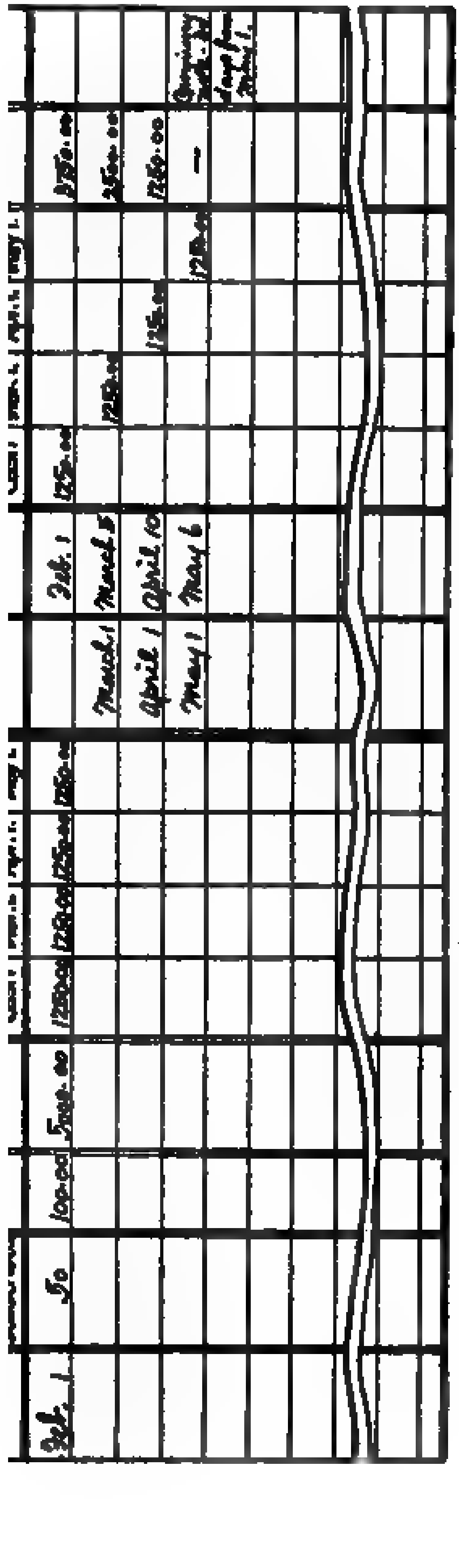


Figure 1. Subscription Ledger

the company; it has no special form, and may consist of a scrap-book in which the minutes are pasted after having been typewritten. A loose-leaf minute book is the most convenient form.

2. Subscription Ledger

When the subscriptions to capital stock are numerous, and subject to calls extending over a period of several months, it is necessary that an account be kept with every subscriber and every instalment. The arrangement of the ledger in which these accounts will be kept is essentially a matter of convenience. It may be, for instance, as shown in Figure 1.

3. Stock Certificate Book

This book, which must be bound, contains the blank certificate to be issued; each certificate is attached to a stub, a perforated line running vertically between the two parts of the document.

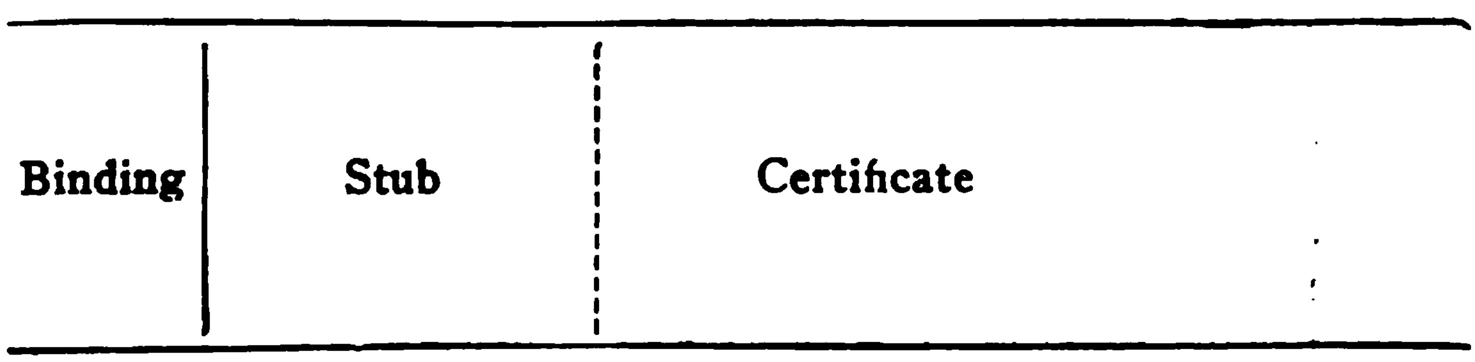


Figure 2. Arrangement of Stock Certificate Book

The stub contains reference to the number of the certificate, the amount of shares which it stands for, the date of issue, and the name and address of the stockholder. It may state the consideration for the issue, or merely the fact that the stock was part of an "Original Issue." It provides for the necessary information in connection with registered transfers of stock from a stockholder to an-

other, for the signature of the stockholder receiving the certificate which corresponds to the stub, and for the date of delivery.

Certificate No. 140
No. of Shares 50
Issued:
On May 1, 1912
To John Doe
Address: Astoria, L. I.
For: Property
From whom transferred:
Name..................................
Address.............................
Date.............................
No. of Original Certificate.................
No. of shares of Original Certificate.......
No. of shares transferred.................

Received Certificate No. 140 for 50 shares
Date, May 1, 1912
Signature John Doe

Figure 3. Stock Certificate Stub

The certificate itself is a more or less elaborate document, bearing the name of the issuing company, reciting the authorized issue of which it is part, the class of stock which it represents (preferred or common), stating whether or not it is full-paid and non-assessable, and the par value of each share. If the stock is preferred, the certificate may recite the details of the issue.

The stock certificate certifies, under the common seal of the corporation and the signatures of authorized officers, that the person whose name appears on its face is the owner of so many shares of capital stock of the company. It states the conditions under which it is transferable, and bears on its back a blank form for the assignment of the stock.

4. Stock Book or Stock Ledger

The stock book (Figs. 4-7) must be so arranged as to comply with the provisions of the statutes of the particular state in which the corporate charter was granted. The law of the State of New York requires that the book contain the names, alphabetically arranged, of all persons who are stockholders of the corporation, showing their places of residence, the number of shares of stock held by them respectively, the time when they respectively became the owners thereof, and the amount paid thereon. It also requires that the stock book shall be open daily, during at least three business hours, for the inspection of its stockholders and judgment creditors, who may make extracts therefrom.

The keeping of a Capital Stock Balance account in the stock book, as shown in Figure 4, is not required by law, nor is it necessary to meet the demands of the stockholders and judgment creditors; it has, nevertheless, the advantage of making the stock book self-balancing, and of corroborating the accuracy of the financial ledger in connection with the amount of capital stock issued and outstanding. The crediting of the shares issued to the account of the individual creditors, is not a matter of accounting principles; it is, however, a matter of common sense, since the corporation is liable to the stockholder for the capital stock issued to him.

5. Corporate (or Stock) Journal

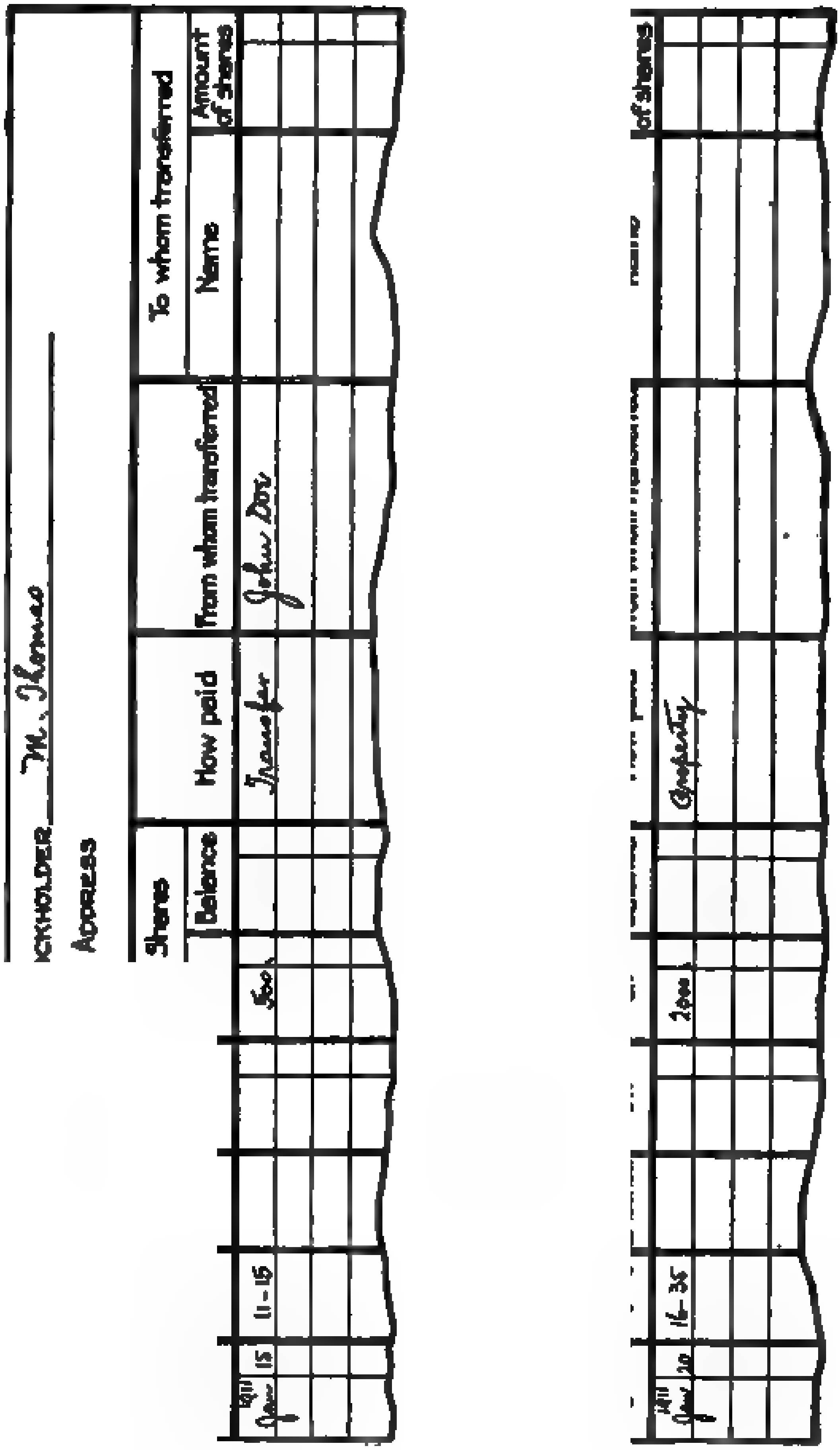
This book (Figure 8) is used only by corporations whose stock is very active. It makes it possible to gather daily the capital stock transactions which have taken place both at the office of the company and at the offices of the duly appointed transfer agents, and to transfer them quickly and accurately to the capital stock ledger. The accounting is done in shares, not in money amounts.

1911 Jan. 1	1-10		1000						
20	16-35		2000						

NAME OF

Date	Number of Certificates		Amount of Shares			How paid	From whom transferred	To whom transferred	
	Issued	Cancelled	Dr.	Cr.	Balance			Name	Amount of shares
1911 Jan. 1	1-10			1000		Cash-Full paid			
		1-5	500		500			M. Thomas	500

Figure 4, 5. Stock Book Accounts



Figures 6, 7. Stock Book Accounts

CERTIFICATES SURRENDERED							CERTIFICATES ISSUED							
Date	By whom	Led. Fol.	Remarks	No. of Certificate	No. of Shares Each Certif.	Total Shares	Date	To whom	Led. Fol.	Remarks	No. of Certificate	No. of Shares Each Certif.	Total Shares	From whom transferred
1919 July 1	M. Trenton	98	[illegible] by attorney	79-83	50	250	1919 July 1	John Doe	11	Cash. Full Paid	210	50	50	
								M. Jones	115		211-215	50	250	M. Trenton

Figure 8. Corporate Journal

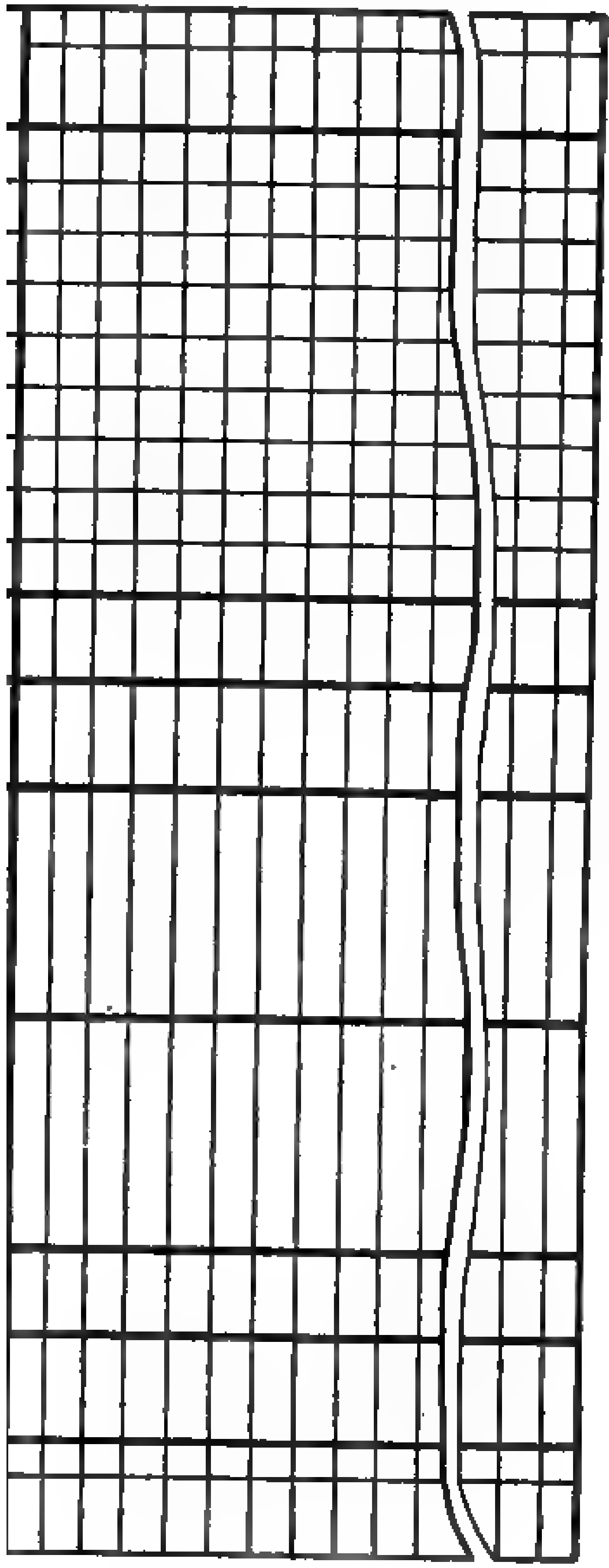


Figure 9. New York Stock Transfer Book

6. Stock Transfer Book

The law of New York prescribes that:

Every corporation or its transfer agent shall keep a just and true book of account in the form prescribed by the comptroller, wherein shall be plainly and legibly recorded in separate columns:

1. The date of making every transfer of stock
2. The name of the stock and the number of shares thereof
3. The serial number of each surrendered certificate
4. The serial number of the certificate issued in exchange therefor
5. The number of shares represented by said certificate
6. The name of the party to whom said certificate was issued
7. The number and face value of the adhesive stamps as affixed and required by the statute

It shall also keep and retain a stock certificate book and all surrendered or canceled shares or certificates of its stock and memoranda relating to the sale thereof, for a period of two years from the date of the delivery thereof.

The requirements as to the stock transfer book vary in the different states. In New York the prescribed form of stock transfer book to be kept by corporations and transfer agents is shown on the preceding page.

Part II—The General Theory and Technique of Accounts

CHAPTER V

ACCOUNTING SYSTEMS—SINGLE ENTRY

The Principles of Single Entry

The purpose of single-entry bookkeeping is to record all the transactions of a business, but to keep running ledger accounts with persons only; that is to say, with the proprietor, the persons who enter into business relations with him (his customers), and the persons with whom he enters into business relations (his creditors). To other invested values, not found in the ledger but ascertainable by means of analysis of books of first record or through periodical inventories, is left the duty of reflecting, at the end of the accounting period, the increases and decreases which they have individually received or suffered.

The basic principles of the system are:

1. Increases of positive values (assets), plus decreases of negative values (liabilities), as revealed by inventories and by the accounts with persons, give all the factors which have increased the wealth of the proprietor.

2. Decreases of positive values, plus increases of negative values, as revealed by inventories and by the accounts with persons, give all the factors which have decreased the wealth of the proprietor.

3. Decreases of positive values, plus increases of negative values, represent the resources which the proprietor has applied to obtain the factors which have contributed to the net increase of his wealth.

Single-Entry Ledger Accounts

Running ledger accounts with persons are to be so kept as to show clearly:

1. For the Proprietor:
   a. The net amount of the values originally invested by him in the business, representing what he owns or is due to him, minus what he owes.
   b. The increases or decreases of the values originally invested by him, resulting from the operations of the accounting period.
2. For the Customers and Creditors:
   a. The amount receivable from them or payable to them by the proprietor, at the incipiency of their business relations with him.
   b. The changes occurring in the indebtedness of the parties as a result of the operations of the accounting period.

Debits and Credits

Under the rules of bookkeeping by the single-entry system, the proprietor credits his capital account, at the beginning of business, with his net investment. Thereafter, the increases or decreases of the personal accounts of the proprietor, of the customers, and of the creditors, are recorded in the ledger by means of debits and credits to the accounts, as indicated by the day book (or journal), which contains the daily recital of all the transactions.

By debit, is meant:

1. The recording by the proprietor, in a ledger account with a person, of claims against that person arising from the sale of merchandise.
2. The recording by the proprietor, of the reduction, or of the settlement in full, of a claim payable to a person who has extended credit to him for merchandise purchased.
3. The recording by the proprietor, in his own account, of the net decrease of the values invested by him.

By credit, is meant:

1. The recording by the proprietor, of the reduction, or of the settlement in full, of his claim against a customer, arising from the receipt of money or its equivalent.
2. The recording by the proprietor, of a debt which he has incurred through purchase on credit.
3. The recording by the proprietor, in his own account, of the net increase of the value invested by him.

The Effect of Debits and Credits

Crediting the proprietor's account with his net investment at the beginning of operations, gives precisely the same result as crediting him with his assets and debiting him with his liabilities.

Debiting a customer with a claim against him of, say, $60 obtained in exchange for merchandise costing, say, $40, sold to him on credit, gives the same result as debiting the proprietor with the cost of the merchandise which has gone out of the business, and crediting him with the new value (representing the cost of the value parted with, plus profits on sale) which has come into the business under the form of a claim against a person.

Crediting a customer with the settlement of his debt to the proprietor, amounts to the same thing as debiting the proprietor with the asset with which he has parted, i.e., a claim against a person, and crediting him with the new asset which has come in, whether this new asset be cash or its equivalent.

Crediting a creditor with the value of the goods sold by him on credit to the proprietor, is equivalent to debiting the proprietor with the new liability which he has incurred, and crediting him with the new asset which he has obtained in return.

Debiting a creditor with the settlement of his claim amounts to crediting the proprietor with the liability which he has liquidated, and debiting him with the amount of cash, or its equivalent, with which he has parted as a result of the transaction.

Crediting the proprietor at the end of the period with the net increase of the values invested by him at the beginning, is equivalent to crediting him, in detail, with all the increases of assets plus the decreases of liabilities, and debiting him with all the decreases of assets plus the increases of liabilities. This, in turn, is identical to crediting him in detail during the accounting period, with all the values which have come into the business, and debiting him with all the values which have gone out of the business. By "values" as used here, is meant not only tangible values, but, as well, increases or decreases of the proprietor's equity in his assets. Since the debts of the proprietor constitute liens against his assets, it follows that when he liquidates a liability there has gone out of the business cash, or its equivalent; but there has come into the business a new value, that is to say, an increase of equity in the form of the decrease of a debt, which is to his benefit and with which he is to be credited.

Equations of Single-Entry System

The system of single-entry bookkeeping is reducible to the following equations:

1. Initial assets less initial liabilities = initial net worth.
2. Increases of assets plus decreases of liabilities = factors in favor of the proprietor.
3. Decreases of assets plus increases of liabilities = factors against the proprietor.
4. Factors for the period in favor of the proprietor less factors for the period against the proprietor = net increase of net worth.
5. Assets at end of the period less liabilities at end of the period = net worth at the end of the period.
6. Net worth at the end of the period less net worth at beginning of the period = net increase of net worth during the period.

In connection with equation 6, it must be said that the net increase of the net worth does not necessarily indicate the extent of the profits obtained. If, for instance, new capital contributions or withdrawals of capital have taken place during the period, the profits would be:

In the first instance:

Net increase of net worth less contributions of capital.

In the second instance:

Net increase of capital plus withdrawals of capital.

Sources of Gains and Losses Not Shown

It would appear from the foregoing, that while the single-entry system makes it possible to obtain the amount of profits (or losses) of a given period, and to sup-

port it, on the one hand, by the detail of the increases of assets added to the decrease of liabilities, and, on the other hand, by the detail of the decreases of assets added to the increases of liabilities, the causes which have brought about the increases and decreases are not obtainable. That this is the opinion of a great many writers of accounting, could be shown by a multitude of quotations. It has been said that single entry "fails to fulfil the object of bookkeeping, in that it does not exhibit the true financial condition of the business, and is incapable of proof of accuracy." Lisle says in "Accounting in Theory and Practice," that "no detailed Profit and Loss account can as a rule be prepared, and there is no satisfactory check on the accuracy of the results, as is provided by the balancing of the books which have been kept by double entry." Greendlinger asserts that "many evils continue to exist although we know them to be such. Single entry is certainly an evil in modern accountancy, and accountants greatly discourage its use—the disadvantages of the method are not lessened if it is used by a small rather than by a large concern."

Notwithstanding the above quotations, it would be wrong to suppose that the single-entry system is of slight use. The fact that it was in vogue in Italy, the birthplace of double entry, up to the year 1869 when a law made the adoption of the latter system compulsory in so far at least as the accounts of the Italian government were concerned, seems to indicate that it is more serviceable than it is generally supposed.

Proprietor's Account

It has been said that, if properly kept, the proprietor's account appearing in a single-entry ledger can be made to reflect, during the accounting period, all the facts which it is necessary to know at the end. It may be of interest

and of some value to take simple, familiar factors, and see how they can be handled in order to prove this contention.

We will consider:

1. Purchases
2. Sales
3. Cash Receipts
4. Cash Disbursements
5. Promissory Notes

as to the effect of the transactions involved, upon both the proprietor's account, and the personal accounts of creditors and customers.

1. Purchases
   a. Credited to the creditors to record their claim against the proprietor.
   b. Credited to the proprietor as representing an asset acquired during the period.
2. Charge Sales
   a. Debited to customers at sales price to record the proprietor's claim against persons for merchandise.
   b. Debited to the proprietor at cost as representing the value of the asset which has been parted with; or debited to the proprietor at sales price, the profit realized on the sale being further credited to him as representing the excess value of the assets which he has received through the exchange over the value of the assets with which he has parted.
3. Cash Receipts (Cash Sales)
   a. Cash received from customers, credited to them to show the reduction of the proprietor's claim, and credited also to the proprietor as representing an asset which has come into the business.

b. Cash received on account of cash sales, credited to the proprietor as representing the proceeds of an asset which has gone out; at the same time merchandise sold, debited to the proprietor at cost as representing the value of the asset which has been sold.

c. Cash received in the form of credits by banks for interest, credited to the proprietor as representing the gain made on investments of cash, etc.

4. Cash Disbursements

a. Cash paid to creditors, debited to them to show the reduction of their claims against the proprietor, and debited also to the proprietor as representing an asset which has gone out of the business.

b. Cash paid for expenses, debited to the proprietor as representing the cost to him of conducting his business, etc.

5. Promissory Notes

a. Received; credited to the customers who give them, and credited also to the proprietor as representing a new asset which has come in.

b. Collected; treated both as a debit and as a credit to the proprietor, to record the exchange of one asset for another.

c. Issued by the proprietor; debited to the creditor to whom issued, and also to proprietor as representing a new liability.

d. Paid; treated both as a debit and as a credit to the proprietor, to record the loss of cash and, at the same time, the decrease of a liability.

Closing the Accounts

The method of handling the accounts at the close of the period is as follows:

1. Customers. The balance of their accounts, less the balance at the beginning of the period, if any, credited to the proprietor at the close of the period; claims against customers being the only asset not directly credited to him during the period.

2. Creditors. The balance of their accounts, less the balance at the beginning of the period, if any, debited to the proprietor at the close of the period; creditors' claims being the only liability not directly debited to him during the period.

3. Closing Inventory of Merchandise. Ignored in so far as the proprietor's account is concerned, since it is already included therein. This is obvious, for if the proprietor's account as it stands has been credited with initial inventory, plus purchases, and debited with sales at cost (or debited with sales at sales price, and credited with profits on sales at time of sales), the excess credits over debits on account of merchandise represent the closing inventory.

4. Proprietor's Account. Closed at the end of the period by inserting on the debit side "Balance" representing the net investment which must be supported by a statement of assets and liabilities; and reopened for the new period by crediting the proprietor with all his assets, and debiting him with all his liabilities as shown by the inventory of all the values, positive and negative.

Practicability of System

That such a system can be used is evidenced by the fact that the principle of the proprietor's account as given above forms the basis of the quadruple-entry systems known as Logismography and Statmography, evolved in

Italy only a few years ago, one of the objects of which is to reflect the net worth of the proprietorship at all times without having to take inventories. That the principles underlying the above treatment of the proprietor's account are correct, is shown by the following examples:

JOHN HARRISON, PROPRIETOR—SINGLE-ENTRY LEDGER
CLASSIFIED TRANSACTIONS

1912			1912		
Jan. 1	Liabilities:		Jan. 1	Assets Invested:	
	Mortgage Payable ...	$5,000.00		Cash	$7,500.00
	Notes Payable	3,000.00		Merchandise.	1,000.00
	Creditors ...	2,000.00		Land and Building...	13,000.00
	Net Investment	15,000.00		Horse, Wagon and Harness ..	2,000.00
				Furniture and Fixtures ..	1,500.00
	Total	$25,000.00		Total	$25,000.00
			Jan. 1	Net Investment	$15,000.00
Jan. 1 to June 30	Assets Parted with During the Period:		to June 30	Net Assets Acquired During the Period:	
	Merchandise, at cost....	$9,000.00		Merchandise purchased..	$12,000.00
	Cash:			Cash received from customers ...	7,000.00
	Paid to creditors	9,500.00		Cash Interest	50.00
	Paid at maturity of notes payable	3,000.00		Promissory Notes received from customers..	50.00
	Paid for current needs.	300.00		Customers' Accounts*...	2,950.00
	Total...........	$21,800.00		Total...........	$22,050.00

* If there had been customers' accounts at the beginning of the period, only the increases would be credited.

JOHN HARRISON, PROPRIETOR—SINGLE-ENTRY LEDGER
CLASSIFIED TRANSACTIONS—*Continued*

Liabilities Incurred During the Period:		Reduction of Liabilities:	
Promissory Notes Payable, issued to creditors	$1,100.00	Notes Payable paid..	$3,000.00
Increase of creditors' accounts, as shown by the ledger.	1,400.00		
Total............	$2,500.00		
Net Investment	$15,750.00		
Total............	$40,050.00	Total............	$40,050.00

If we were to express the factors found in the account of the proprietor, we would obtain:

MERCHANDISE TRANSACTIONS

Debits

Initial Inventory..........................	$ 1,000.00	
Purchases	12,000.00	
Total debits..............................		$13,000.00

Credits

Cost of goods sold (i.e., purchase cost)................		9,000.00
Closing Inventory (difference between cost of goods purchased and cost of the part of these goods which was sold)		$4,000.00

Transactions with Customers

Debits		
Initial Balance ....(none)	$........	
Sales:		
Settled for in cash........................	7,000.00	
Settled for by notes......................	50.00	
Balance carried on open accounts.........	2,950.00	
Total debits..................................		$10,000.00
Credits		
Cash Received..............................	$7,000.00	
Promissory Notes..........................	50.00	
Total credits..................................		7,050.00
Balance due by customers........................		$2,950.00

Transactions with Creditors

Credits		
Initial Balance..............................	$2,000.00	
Purchases	12,000.00	
Total credits..................................		$14,000.00
Debits		
Cash paid to them..........................	$9,500.00	
Promissory Notes..........................	1,100.00	
Total debits..................................		10,600.00
Balance due to creditors..........................		$3,400.00

Transactions in Promissory Notes Receivable

Received from customers, not matured, not discounted..	$50.00

Transactions in Promissory Notes Payable

Credits		
Initial Balance..............................	$3,000.00	
Given to creditors in settlement of their accounts	1,100.00	
Total credits..................................		$4,100.00

TRANSACTIONS IN PROMISSORY NOTES PAYABLE—*Continued*

Debits		
Paid in cash at maturity		3,000.00
Balance outstanding		$1,100.00

CASH TRANSACTIONS

Debits		
Initial Investment	$7,500.00	
Received from customers	7,000.00	
Credited by bank for interest	50.00	
Total debits		$14,550.00
Credits		
Paid to creditors	$9,500.00	
Paid at maturity of notes payable	3,000.00	
Paid for current expenses	300.00	
Total credits		12,800.00
Balance on hand		$1,750.00

PROFIT AND LOSS

(For the period)

Profits		
Gross profit on merchandise sales	$10,000.00	
Less cost of sales	9,000.00	
	$1,000.00	
Interest on bank balances	50.00	
Total profits		$1,050.00
Expenses		300.00
Net profit		$750.00

From the foregoing information we can build up, without difficulty, the following statement which has been said to be the only form of financial statement possible under single entry:

STATEMENT OF ASSETS AND LIABILITIES OF JOHN HARRISON, AT JANUARY 1 AND JUNE 30, 1912, AS PER HIS SINGLE-ENTRY LEDGER, BOOKS, AND RECORDS

Assets

	January 1	June 30	Increases	Decreases
Cash	$ 7,500.00	$ 1,750.00		$5,750.00
Merchandise	1,000.00	4,000.00	$3,000.00	
Land and Building	13,000.00	13,000.00		
Horse, Wagon and Harness	2,000.00	2,000.00		
Furniture and Fixtures	1,500.00	1,500.00		
Sundry Customers		2,950.00	2,950.00	
Notes Receivable		50.00	50.00	
Total	$25,000.00	$25,250.00	$6,000.00	$5,750.00

Liabilities

	January 1	June 30	Decreases	Increases
Mortgages Payable	$ 5,000.00	$ 5,000.00		
Notes Payable	3,000.00	1,100.00	$1,900.00	
Creditors' Accounts	2,000.00	3,400.00		$1,400.00
Total	$10,000.00	$ 9,500.00	$1,900.00	$1,400.00
John Harrison, Capital	15,000.00	15,000.00		
Total	$25,000.00	$24,500.00		
Total Increases and Decreases			$7,900.00	$7,150.00
Net Increase of Investment			$ 750.00	

From the foregoing, it will be seen that sweeping denunciations of the single-entry system are not fully justified.

We need not, however, go so far in order to clear single entry of the odium cast upon it by unsympathetic writers who have sentenced it on the merits of its ledger. The ledger is not the only book of record which can be

kept under the system; and if double entry has found it necessary to divide its journal into its components, i.e., cash, purchases, sales, etc., as we will see later when treating of the evolution of the books of account, there is no reason why single entry could not do the same thing and be made highly analytical. Admittedly, the single-entry ledger is of no great help so far as statements are concerned; but few accountants would be willing to admit that they could not prepare financial statements from books of original entry. A merchandise stock book, a cash book, a sales book, and a purchase book are not necessary to the proper working of single entry, but they can be kept without interfering with the principles and purpose of the system.

It cannot be denied that no trial balance of a single-entry ledger can be taken if we give to the word "trial balance" the sense that it has only when referring to the general ledger kept by double entry. It must be admitted that errors which creep into single-entry records are not readily detected, for there is no equilibrium to be maintained; that without a properly kept proprietor's account, the ledger does not show the causes for the increases and decreases of assets and liabilities, and that, therefore, there can be no profit and loss account in the ledger; that the assets and liabilities can be obtained at the end of the period only by inventory, or by adding to, or deducting from, the assets and liabilities as at the beginning of the period, the transactions of the period shown by the sundry records and memoranda. But when all that is admitted, it remains true that single entry is capable of giving excellent results.

CHAPTER VI

ACCOUNTING SYSTEMS—DOUBLE ENTRY

The Purpose of Double Entry

We have seen that the purpose of single entry is to record, in the ledger, transactions with persons only. It does not concern itself with the effect of such transactions upon invested values, since this will be shown by an inventory at the end of the period; nor is it interested in individual results and causes, since the only thing of importance is the net increase or decrease of net worth. In contradistinction, the purpose of double entry is to record in the ledger all financial transactions, of whatever nature they may be, and to take into consideration the financial fact, its cause, its effect, and its result.

Principles of Double Entry

The system is based on the doctrine of equilibrium, that is to say that tendency supposed to be inherent in the nature of things, which makes them seek to maintain a harmonious balance among their sundry elements. Business is amenable to the doctrine of equilibrium. To show that it has acquired a harmonious balance among its elements, and maintained it, the recording system known as double entry must be employed, of which the following are the underlying principles:

1. Initial equilibrium must be established by balancing what the proprietor owns, that is to say his assets, with:

   a. What he owes, i.e., his liabilities
   b. His equity in his assets, i.e., his net investment, or net worth
2. The initial equilibrium once established, is disturbed whenever a financial transaction occurs.
3. Every financial transaction may be subdivided into two or three parts:
   a. The effect
   b. The counterpart
   c. The result, if any
4. Every financial transaction has for effect the income or the outgo of financial values.
5. Incoming or outgoing values are:
   a. Counteracted by outgoing or incoming values of a weight:
      (1) Greater than their own; in this case, there has been an exchange of values resulting in a gain or a loss.
      (2) Smaller than their own; in this case there has been an exchange of values resulting in a loss or a gain.
      (3) Equal to their own; in this case there has been an exchange of values with no result.
   b. Counteracted by the receipt or the performance of services, the cost or the value of which they measure.
   c. Not counteracted by either income or outgo, or by service received or rendered, and as a consequence, resulting in a profit or a loss.

A Balancing System

Thus, the system of double-entry bookkeeping may be compared to a balancing scale provided with two weigh-

ing dishes, one for the positive (debit) facts, the other for negative (credit) facts. As, of necessity, the business cannot be carried on unless the positive facts (debits) exceed the negative facts (credits), it follows that in order to establish equilibrium between the two sides of the scale, an additional weight must be added on the right side to represent the equity of the proprietor in the positive facts.

Positive facts assert that the values which they represent are owned by the proprietor, or that they have been expended or lost by him in the course of operations. Negative facts deny the ownership asserted by positive facts; or they show gains offsetting losses or benefits offsetting the disappearance of positive values.

The weighing of transactions, which is necessary in order that their effect, their counterpart, and their result may be ascertained and recorded in such a way as to reestablish equilibrium, is performed through the help of charges and discharges, that is to say, debits and credits. The book in which the debits and the credits are recorded is the journal.

Rules for Journalizing

The rules for the recording of debits and credits, that is to say, the rules for journalizing, are as follows:

1. At the incipiency of the business:

a. The business is to be debited in detail with what it has received from the proprietor.

b. The business, being debited with what it has received, must, of necessity, be credited in detail with what it will be called upon to spend in order that it may meet the obligations incurred by the proprietor as a result of the acquisition of the wealth which he has invested.

c. The business, being debited in accordance with the

above rules with all the values invested by the proprietor, and credited with what it will have to spend in order to retain them, stands, in fact, debited with the proprietor's net wealth; hence, the proprietor must be credited with his net investment, in order that equilibrium may be had.

2. During the course of the accounting period:

a. The business being charged with such values as have been intrusted to it, is, of course, debited with all increases in the said values, through the medium of proper debits to the particular values which have been benefited by the increases. In order that the equilibrium thus disturbed may be reëstablished, such debts as have been incurred, owing to the acquisition of the increases in wealth, must be recorded through the medium of proper credits to the individual creditors.

b. The business being debited in detail with all values, any change occurring to the benefit of any given value, and to the detriment of another, or others, must be recorded by debiting the beneficiary, and crediting the loser, or losers.

c. Any reduction in the amount of the values, due to the liquidation of the proprietor's debts, must be shown by a debit to the beneficiary of the settlement, and a credit to the value which has been decreased.

d. Any loss sustained is to be credited to the value which has been partially or totally lost, and charged to an account which will record, during the fiscal period, all the losses incurred.

e. Any gain is to be debited to the value which has been increased thereby, and credited to an account which will record all the gains made during the period.

3. At the end of the fiscal period:

The net amounts of the gains made, as represented by

the summary account which shows all losses and gains, is now credited to the proprietor. Conversely, if the preponderance is on the side of losses, the proprietor must be debited. The equilibrium which has been disturbed by the credit or the debit to the proprietor, is reëstablished by debiting or crediting the summary account, thereby closing it.

Profit and Loss Account and Nominal Accounts

Modern bookkeeping has found the Profit and Loss account, which is the name given to the summary account mentioned above, awkward and inconvenient. The volume of the transactions which occur in the conduct of present-day business is so considerable, that causes and results, if treated in one account, necessitate extensive analysis in order that proper information may be obtained. It has been found advantageous to create during the fiscal period a series of accounts which are charged with all losses due to the parting with of values which have not been counteracted by the incoming of values possessing financial weight. In other words, all expenses paid by the business are recorded in special accounts bearing a title indicative of their contents. At the end of the fiscal period, all these accounts, having served their purpose, which was to gather, analytically, facts of a similar nature, are closed into the Profit and Loss account by means of a credit to the individual accounts, and a debit to the Profit and Loss account for the aggregate amount. The same method is used for such gains as are indirectly connected with the operations of the period (such as interest on bank balances, cash discounts on purchases, etc., etc.). The Profit and Loss account is still directly debited and credited, during the fiscal period, with all such losses and gains as are not the result of the operations of the period (for instance, the loss of a customer's account or the loss

of property through fire or other causes over which the business has no control), and with gross profits on merchandise. This last entry is made directly in the Profit and Loss account because the result which it shows is known only at the end of the period, after the application of the inventory.

Rules for Double Entry

Repeated attempts have been made to reduce the principles of double-entry bookkeeping to simple rules easily memorized and supposed to cover all possible business transactions; for instance:

1. "Debit what comes into the business; credit what goes out of the business."
2. "Whoever or whatever owes the business or firm is a debtor, and must be debited; whoever or whatever the business or firm owes is a creditor, and must be credited."
3. "The fundamental principle of double entry is that there must be a credit for every debit."

Irrespective of the fact that such formulas are apt to lead the reader towards the fatal belief that the mastery of double-entry bookkeeping is merely a matter of memorizing a simple rule, they are more than useless to the student of accounting. He does not understand them, and, consequently, is unable to apply them. Taking as an illustration rule 1, which is probably the least misleading of the three, let us assume that $50 in cash has been received by the business in consideration of the indorsement by the proprietor of a promissory note executed by a person with whom he has had business dealings. How would the student apply the rule? He would, naturally, debit cash, because it is plain that cash has come into the business; but what would he credit? That which has

really gone out of the business, admitting that the student is sufficiently advanced to reason that far, is precisely the one thing which he cannot credit, since it is a possible loss of equity in the assets in the form of a liability contingent upon the dishonor of the note at maturity. Would he see that the credit is to be given to the cause which brought about an increase in the asset "Cash" without necessitating the outgo of an equivalent amount of another financial value?

Basic Differences Between Single and Double Entry

The great advantage which double entry possesses over single entry, lies in the difference between the duties of the basic books used under both methods, i.e., the journal, and the ledger.

The single-entry journal confines itself to the daily recording of facts, earmarking the transactions with persons in such a manner that they can be gathered in another book, the ledger, where their extent and their status may be readily determined. The single-entry ledger does not concern itself with the other factors of the proprietor's wealth. It cannot be balanced, it cannot be closed, and as it usually does not take advantage of the analytical power of other books, it is practically of no help in the preparation of financial statements.

The double-entry journal is not only a recorder, but an investigator, an analytical force always at work, which, as between debits and credits, weighs and classifies everything which is presented to it. If the occasion arises, the journal gives a name to, and appraises, the weights necessary to reëstablish the equilibrium between the two main elements of a transaction. Having thus classified the facts, the journal passes them over to the ledger, which groups them with a view to the preparation of

financial statements. Both the journal and the ledger can be balanced by themselves, thereby acting as a check one upon the other.

Passing from Single Entry to Double Entry

Passing from single entry to double entry should present no difficulty whatever to one who is familiar with the principles underlying these two systems of accounting.

If the books used for single entry are to be retained under the new system, two journal entries are required in case the profit of the period has not been credited to the proprietor's capital account. In the contrary case, one entry will be sufficient. If new books are to be opened, one entry will accomplish the change. To illustrate, we will suppose that Charles Adams, whose books have been kept by single entry, desires to adopt the double-entry system, and assume:

1–a. That the present books are to be retained.
  b. That Charles Adams' capital account has not been credited with the profits of the period.

2–a. That new books are to be opened.

The procedure under the first assumption would be:

1. Analyze the single-entry records, and obtain therefrom all possible information leading to the establishment of a statement of assets and liabilities similar to the model given in Chapter V; supplement the information thus obtained by any further step necessary to ascertain the exact status of the business at the date of the change of systems.
2. Journalize the facts thus ascertained, in such a manner as to show:

a. In the first entry:

(1) All the assets shown by the statement of assets and liabilities, whether already on the ledger, or not.

(2) All the liabilities, whether already on the ledger, or not.

(3) The proprietor's net investment as it stood at the beginning of the period.

(4) The profit of the period, representing the amount by which the assets at the end of the period exceed the liabilities at the end of the period, plus the proprietor's net investment at the beginning of the period.

(5) Earmark by means of some appropriate sign, the assets and liabilities which are already in the ledger, and in the explanation of the entry refer to the fact that these items require no posting.

b. In the second entry:

(1) The closing of the profit and loss balances to the debit or to the credit of the proprietor.

If the net profit of the period has been credited to the proprietor before the passing from single to double entry, only one journal entry is required. In this case, the excess of assets over liabilities represents exactly the capital invested, as shown by the single-entry ledger.

Example based on the first assumption:

JOURNAL OF CHARLES ADAMS

Ledger Folio		Dr.	Cr.
1	Land and Buildings....................	$6,000.00	
3	Furniture and Fixtures as per appraisal..	915.00	
5	Horse, Wagon and Harness.............	750.00	
6	Merchandise Inventory (as per inventory book)	3,435.00	
7	Cash in bank and in office (as per bank certificate and physical count).........	3,470.00	
10	Notes Receivable.......................	50.00	
13–30	Sundry Customers (as per list).........	995.00*	
60	To First Bond and Mortgage Payable.		$2,500.00
62	Notes Payable....................		2,000.00
80–90	Sundry Creditors (as per list)....		1,800.00*
95	Profit and Loss (as per analysis).		1,315.00
100	Charles Adams, Capital...........		8,000.00*
	To change the books of Charles Adams from single entry to double entry. The facts reflected above have been obtained from a statement of assets and liabilities, showing increases, decreases, and net capital increase, prepared as of December 31, 1911, and now on file.		
95	Profit and Loss........................	$1,315.00	
100	To Charles Adams, Capital...........		$1,315.00
	To transfer to the capital account of the proprietor the net profit of the year ended December 31, 1911, as shown by the analysis of his books, records, and accounts, made in anticipation of the change from single entry to double entry.		

As to the facts which are already in the ledger and require no posting, they depend entirely upon the condition of the single-entry books. The example given above presupposes that the books of Charles Adams complied with the rules of single entry, and carried only accounts with persons.

* These items are already on the books, and require no posting.

The procedure under the second assumption would be similar in every respect, the only difference being in the form of the journal entry, which might be as follows:

JOURNAL OF CHARLES ADAMS

Ledger Folio		Dr.	Cr.
	Pro Forma		
	Charles Adams, sole trader, having abandoned the single-entry system by which his books were kept up to this date, new books are to be opened. The following entry is made to record the assets and the liabilities with which he begins business, as supported by analyses and other documents now on file, reference to which is hereby made.		
1	Land and Buildings....................	$6,000.00	
3	Furniture and Fixtures as per appraisal..	915.00	
5	Horse, Wagon and Harness............	750.00	
6	Merchandise Inventory (as per inventory book)	3,435.00	
7	Cash in bank and in office (as per bank certificate and physical count)........	3,470.00	
10	Notes Receivable.......................	50.00	
13–30	Sundry Customers (as per list).........	995.00	
60	To First Bond and Mortgage Payable.		$2,500.00
62	Notes Payable...................		2,000.00
80–90	Sundry Creditors (as per list)....		1,800.00
100	Charles Adams, Capital...........		9,315.00

In regard to the sundry customers and creditors, they would be stated individually, and posted from the journal or stated as shown above and posted from the list.

CHAPTER VII

ACCOUNTING SYSTEMS—TRIPLE AND QUADRUPLE ENTRY

Logismography

The respect which the accountants of continental Europe have for the journal, may or may not be due to the stringent requirements of fiscal laws; whatever its cause, it has greatly complicated the application of bookkeeping to modern conditions. In 1869, the enactment of the Italian law making compulsory the adoption of double-entry bookkeeping by the Italian government, found the native accountants fretting under what they called the lack of elasticity of the new system. In 1872, the chief accountant of the War Department of Italy, Giuseppe Cerboni, introduced a new system of bookkeeping, which he called Logismography; that is to say, the logical expression of bookkeeping facts.

Cerboni enunciated what is known in Europe as "The Cerbonian Doctrine," generally referred to in English-speaking countries as "the personalistic theory of accounts." He claimed that it was inadmissible that the proprietor should be debited with his assets, i.e., charged with what he owns, and credited with his liabilities, and further credited with the excess of his assets over his liabilities. He advanced the theory that the business represents the aggregate of the persons who are intrusted with the wealth of the proprietor, or who have intrusted the proprietor with part of their wealth. Hence, instead of debiting and crediting accounts, he suggested debits and

credits to the cashier, the storekeeper, the manager of the building, the mortgagee, the banker, etc., etc. This led to the division of the general ledger into three parts, as follows:

1. Containing accounts of the proprietor, with each one of the values invested by him in the business, and with each one of the values which he owed.
2. Containing accounts with the persons who held the values invested by the proprietor in the business, or who held claims against him.
3. Containing accounts showing the causes for the fluctuations reflected by the values contained in Part I.

It will be seen from the foregoing that in some instances, triple and quadruple entries had to be resorted to. For instance:

A building costing $5,000 is destroyed by fire. The journal entries might be as follows:

Ledger I

Proprietor	$5,000.00	
To Building............		$5,000.00

Ledger II

To John Doe, Keeper of Building		$5,000.00

Ledger III

Losses due to fire..........	$5,000.00	

As a result of this complicated system, the facts obtainable at the end of the period in regard to the loss by fire were:

1. The capital of the proprietor had been reduced by $5,000, through the destruction of the building.

2. John Doe was discharged from his liability to the proprietor in so far as the value of the building intrusted to him was concerned.
3. The cause for the impairment of the proprietor's capital was a fire.

The same facts could be obtained by double entry, in a much simpler way, and the system was abandoned by the Italian government at the death of its inventor.

Statmography

This system, which was invented by Emanuele Pisani, a professor at the High School of Commerce of Bari, Italy, has for its object, in the words of Pisani himself, to keep books "through the medium of double, triple, and quadruple balances." The system is supposed to be ideally adapted to the needs of governments, municipalities, and all industries managed by representatives of the people for the good of the people. It attempts to differentiate and harmonize three classes of facts:

1. The "dynamic" facts, which consist of the incoming and outgoing transactions of the accounting period.
2. The "statical" facts, which might be called the "status quo" of the business at the beginning of the period, as influenced by losses which have no connection with the operations of the business and are due to acts of God, or to mismanagement of employees, etc.
3. The "statico-dynamic" facts, which are nothing more than the causes which have brought about the increases and decreases of assets and liabilities.

It does not appear that statmography has as yet induced European municipalities or government banks to

abandon the older system of double entry, but it must be said that it has greatly influenced the terminology of their financial statements.

The subject of the quadruple-entry system has been introduced in this book, because it serves to emphasize the fact that the great aim of accounting the world over is so to analyze financial transactions that they will not only measure the extent of the success or of the failure of the business venture, but also to classify the causes and present them logically in order that they may give administrative information, and make them express in their own way the history of every department of the organization.

CHAPTER VIII

THE FINANCIAL BOOKS—THE JOURNALS

The books which are necessary in order that accounts may be kept successfully, are:

1. The Journal
2. The Ledger

The Journal

The original journal was not a book of first record. The transactions were entered, as they occurred, in a species of narrative book, *"la prima nota,"* or preliminary record, the only claim of which was to be thorough and chronological. From this *"prima nota,"* which might be called "the blotter" or "day book," the transactions were transferred to the journal in such a manner as to gather as far as possible the facts of homogeneous nature.

The journal originally contained only one column, the debits and credits being earmarked, close to the column, by means of the contractions Dr. (Debtor) and Cr. (Creditor). In 1796, John of Bristol advocated the use of two journal columns, one for debits and one for credits. This gave to the journal its present form:

Date	Accounts and Explanations	Posting Reference	Dr.	Cr.
1912				
Jan. 1	Promissory Notes Receivable....	15	$150.00	
	To John Dorman..........	75		$150.00
	For settlement by note (dated 1/1/12, due 3/1/12, indorsed by V. Curtis) of his account current.			

The addition of the second column had the advantage of minimizing the possibility of error, since it made the book capable of being brought to a balance showing that the debits equalled the credits.

With the possible exception of certain economic types of organization where the tremendous mass of detail to be handled, and the multiplicity of its sources, make its retention by the auditor a matter of convenience, the journal in its original form is a thing of the past. One after another, its component parts have been detached and built up into separate journals bearing titles which, to the layman, do not even suggest the common origin of the books. The journal, as such, is still intrusted with the recording of opening entries, correcting or adjusting entries, and closing entries. This, interpreted in the light of what has been said in connection with double entry, means that the functions of the present-day journal are to establish the original equilibrium; to harmonize such discrepancies as occur during the fiscal period through the erroneous recording of transactions; and, at the end of the fiscal period, to gather all nominal accounts to be closed into the Profit and Loss account, to close them, and, in turn, to close the Profit and Loss account to the debit or credit of the proprietor, or of an account representing undrawn or undistributed profits.

The Sub-Journals

The several steps taken in the segregation of the journal accounts have theoretically been as follows:

1. The removal of all cash transactions
2. The removal of all transactions referring to merchandise
3. The removal of all personal transactions not included in 1 and 2

1. The removal of all cash transactions from the journal has eliminated:

a. The payments to creditors, involving discounts, allowances and rebates, and, in some instances, return of goods.

b. The payments to customers in the form of refunds.

c. Receipts from customers, involving discounts, allowances and rebates, and, in some instances, return of goods.

d. Receipts from creditors in the form of refunds.

e. Payments for expenses of conducting the business, expenses incidental to the receipt or shipment of merchandise, payments for services rendered, etc.

f. The receipts of borrowed money, the proceeds of the sale of assets, or of the discounting of promissory notes, etc., etc.

g. The disbursements incident to the liquidation of liabilities incurred through loans, etc., to the dishonor of discounted paper, to the withdrawal of funds by the proprietor, etc., etc.

2. The removal of all merchandise transactions from the journal has eliminated:

a. Purchases, and returns of part thereof by the proprietor.

b. Sales, and returns of part thereof to the proprietor.

3. The removal of personal transactions from the journal has eliminated:

a. The receipt, or issuance, of promissory notes, drafts receivable or payable, and other commercial paper; and, generally, the recording of all

other transactions not covered by the foregoing.

The dissociated components of the original journal have been built up into a complete system of journals affording a limitless distribution of work, besides giving without effort a complete classification of transactions. Thus we have:

1. The cash journal (cash book) itself, divided into two parts, one for the debits to cash and credits to other accounts; the other for credits to cash and debits to other accounts.

2. The merchandise journal, divided into as many subdivisions as the business comports; for instance:
   a. Purchase Journal
   b. Sales Journal
   c. Returned Purchases
   d. Returned Sales

3. The promissory notes journal, divided into two parts:
   a. Notes Receivable
   b. Notes Payable

4. The general journal, in which are recorded all transactions which cannot find expression in the other journals.

The "Modern Recording Media" in the following diagram are generally known to accountants as "books of original entry," that is to say, books in which transactions pertaining to the subject matter indicated by the title of the book are entered as they occur. These books are, as a rule, supposed to be used periodically as posting media.

Component Parts of Original Journal	Modern Recording Media	Contents of Modern Media (Method of Handling)
Opening Entries: Assets Liabilities Proprietor's Net Investment	General Journal	Dr. Assets Cr. { Liabilities Proprietor }
Merchandise Transactions: Purchases	Purchase Journal	Dr. Merchandise Cr. Creditors
Sales	Sales Journal	Dr. Customers Cr. Merchandise
Returned Purchases	Returned Purchase Journal	Dr. Creditors Cr. Merchandise
Returned Sales	Returned Sales Journal	Dr. Merchandise Cr. Customers
Cash Transactions: Receipts from Customers Receipts from Creditors (refunds) Receipts from all other sources Incidental Transactions: Discounts, Allowances, Rebates } To Customers Other Discounts Disbursements to Creditors Disbursements to Customers (refunds) Disbursements for all other causes Incidental Transactions: Discounts, Allowances, Rebates } From Creditors	Cash Journal, divided into two sections	Debit Side: Dr. Net Cash * { Allowances Discounts Rebates } Cr. Customers Creditors (refunds) Other Ledger Accounts* Credit Side: Cr. Net Cash * { Discounts Rebates Allowances } Dr. Creditors Customers (refunds) Other Ledger Accounts*

* Subject to monthly analysis and detail posting therefrom.

Component Parts of Original Journal	Modern Recording Media	Contents of Modern Media (Method of Handling)
Transactions with Persons Not Included Above: Notes and Bills Receivable and Payable	Notes and Bills Receivable and Payable Journal, in two sections	First Part: Dr. Notes and Bills Receivable Cr. Customers Second Part: Cr. Notes and Bills Payable Dr. Creditors
Correcting Entries	General Journal	Dr. Account over-credited Cr. Account under-credited
Closing Entries	General Journal	Close all the accounts which are raised during the accounting period to reflect the causes for increases and decreases of invested values, by crediting individually the accounts showing debit balances and debiting Profit and Loss with the aggregate amount; reverse the procedure for accounts showing credit balances. Close Profit and Loss by debiting it with the net gain and crediting proprietorship. If the result of operations is a loss, credit Profit and Loss and debit proprietorship.

The dissecting of the original journal into its component parts, may or may not have been accomplished as a direct result of the organization of business into departments. Still, the necessity of adapting the financial accounting

records to the needs of the various operating branches of the administration, and to the ever-increasing demands of executives for multiple, accurate, and readily obtainable information, must have been felt keenly by the counting house, if we are to base our judgment upon the quantity, and the analytical construction of the records which it has evolved and placed at the disposal of the various departments.

Purchasing Department—Purchase Journal

Irrespective of the extent of its own activities, which it must know at all events, the purchasing department, being the purveyor of the factory as well as of the other departments (such as shipping, selling, and administrative), must supply the accounting division with its quota of the facts necessary to ascertain the cost of operations. The information required may extend not only to the departments for whose account the purchases are made, but, as well, to the classes of goods bought; whatever it may be, the purchasing department finds in the purchase journal an adaptable and efficient helper, as will be seen by reference to the accompanying Figures 10 and 11.

In connection with the purchase journal, there may be kept, if occasion demands, a "returned" purchase journal built up on precisely the same lines as the purchase journal. If the returns are few, a section of the purchase journal may be assigned to them; if they are insignificant, they might be recorded by the accounting division in the general journal from data supplied by the purchasing department.

Sales Department—Sales Journal

The sales department, outside of the data which it must furnish to the accounting division, may be vitally interested in:

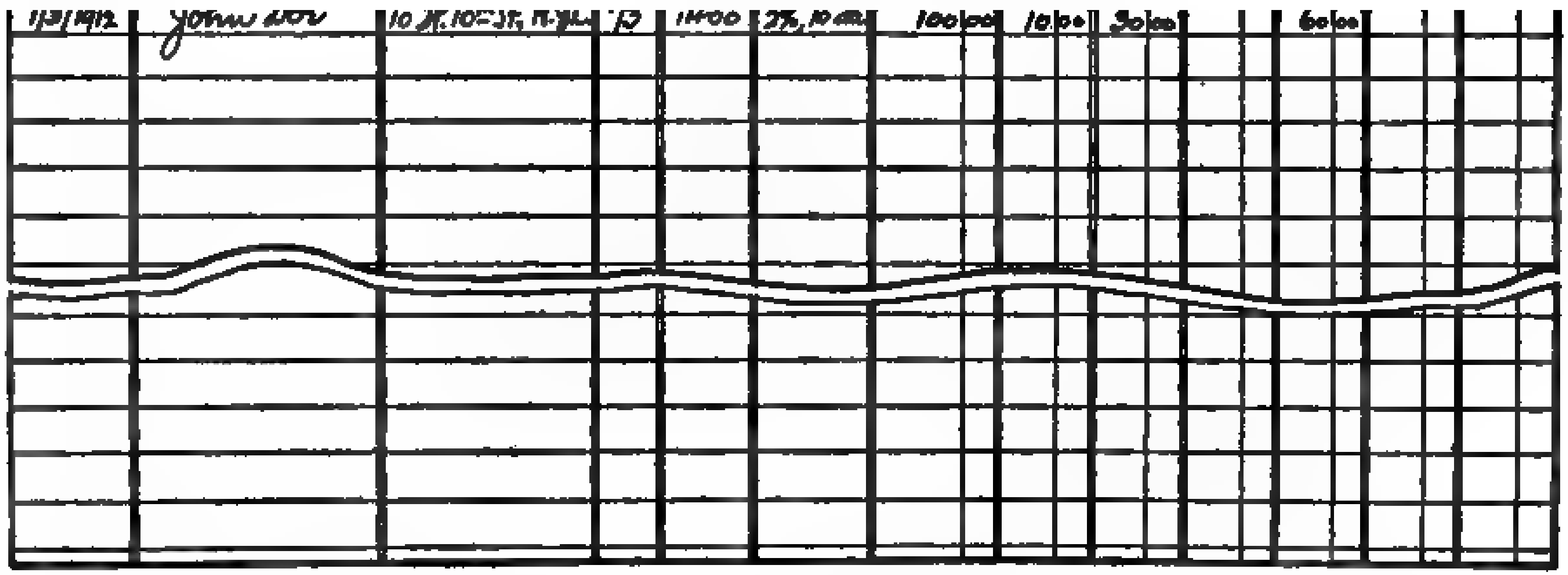


Figure 10. Purchase Journal

* The letters appearing in the distribution columns represent the sundry types of raw materials which are used in the manufacture of goods. The number of columns is limited only by convenience or by the classes of goods carried.

Date	Name of Creditor	Address	Led. Folio	Invoice No.	Terms	Amount	Distribution						
							Shipping		Selling		Administration		
							Material	Expense	Material	Expense	Account	L.F.	Amount

Figure 11. Purchase Journal

1. Statistics of sales by communities
2. Statistics of sales by salesman and district, as distinguished from sales made by the home office

Figures 12 and 13 illustrate the adaptability of the journal to the requirements of the sales department. The remarks concerning "purchases returned" under the discussion of the purchase journal, apply as well to sales returned.

Treasurer's Department—Cash Journal

The primitive cash book was nothing more than a memorandum account with cash, in which the receipts appeared on the left and the disbursements on the right. From time to time the transactions were analyzed and recorded in the journal. The disadvantage of the book lay, not only in the duplication of work which it necessitated, but, as well, in the cross entries which had to be made under certain not uncommon conditions, such, for instance, as a cash settlement involving the giving or taking of a cash discount.

To illustrate: Customer A, whose indebtedness amounted to, say, $200, remitted within ten days, and taking advantage of the cash discount, sent $196. The entries were made as follows:

CASH BOOK

Dr.			Cr.		
Date	Name and Explanation	Amt.	Date	Name and Explanation	Amt.
1914			1914		
Feb. 1	Customer A (bill of Jan. 25, 1914).....	$200.00	Feb. 1	Customer A (discount on bill, Jan. 25, 1914)..........	$4.00

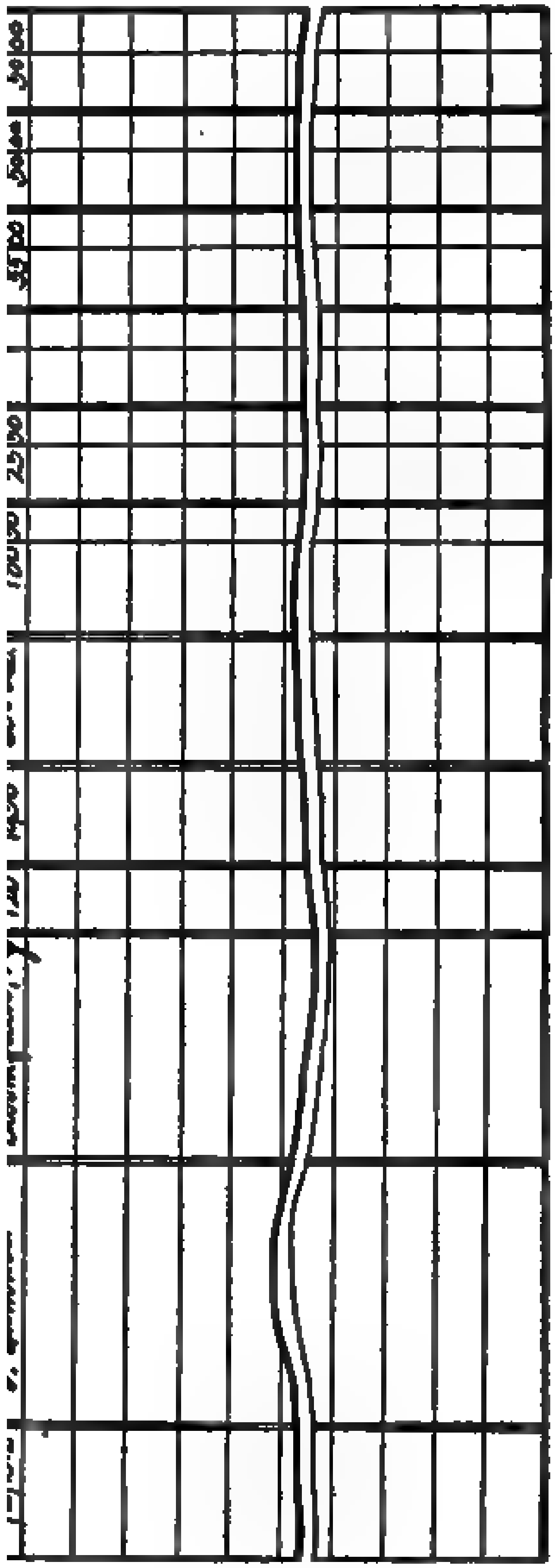


Figure 12. Sales Journal

* The letters appearing in the distribution columns represent classes of merchandise.

							Home Office	J	F	M	A	L	P
1/1/42	M. Meyer	Mobile, Ala.	141	375	30 days	300.00							
	S. Vosper	–	165	376	30 "	150.00	150.00		150.00				

Figure 13. Sales Journal

* The letters appearing in the distribution columns refer to individual salesmen.

JOURNAL

Names and Explanations	Dr.	Cr.
Feb. 1, 1914		
Cash	$200.00	
To Customer A............................		$200.00
For settlement in cash of our bill of Jan. 25, 1914, subject to a cash discount of 2% for 10 days.		
Discount	$4.00	
To Cash....................................		$4.00
For discount of 2% on $200.00 to Customer A on our bill of Jan. 25, 1914.		

The foregoing method of handling the cash book was open to the objection that it did not show the actual cash transactions as they occurred, and that it rendered the audit of the cashier's accounts very lengthy and complicated. This objection, serious as it may have been, was as nothing to the defects developed by the books so kept when, having evolved with the business, the cashier became treasurer, that is to say, when the clerk of the shop became an officer of the now highly organized body economic. The treasurer needed information of the most varied nature, and he had to make his records reflect it. He quickly realized that if the receiving and disbursing of cash gave rise to deductions from the face of the amounts to be received and paid out (in the form of discounts, allowances for claims, returns of goods sold or purchased, etc.), it was possible to transform the cash book into a cash journal which would not only record accurately the status of the asset "Cash," as affected by the transactions of the period, but indicate as well the accounts which were to be debited (or credited) and maintain equilibrium between cash and the accounts which were to be credited (or debited) as a result of the cash transactions.

Accordingly, he built up the cash journal (Figures 14, 15), which provides on one side of the page, columns for

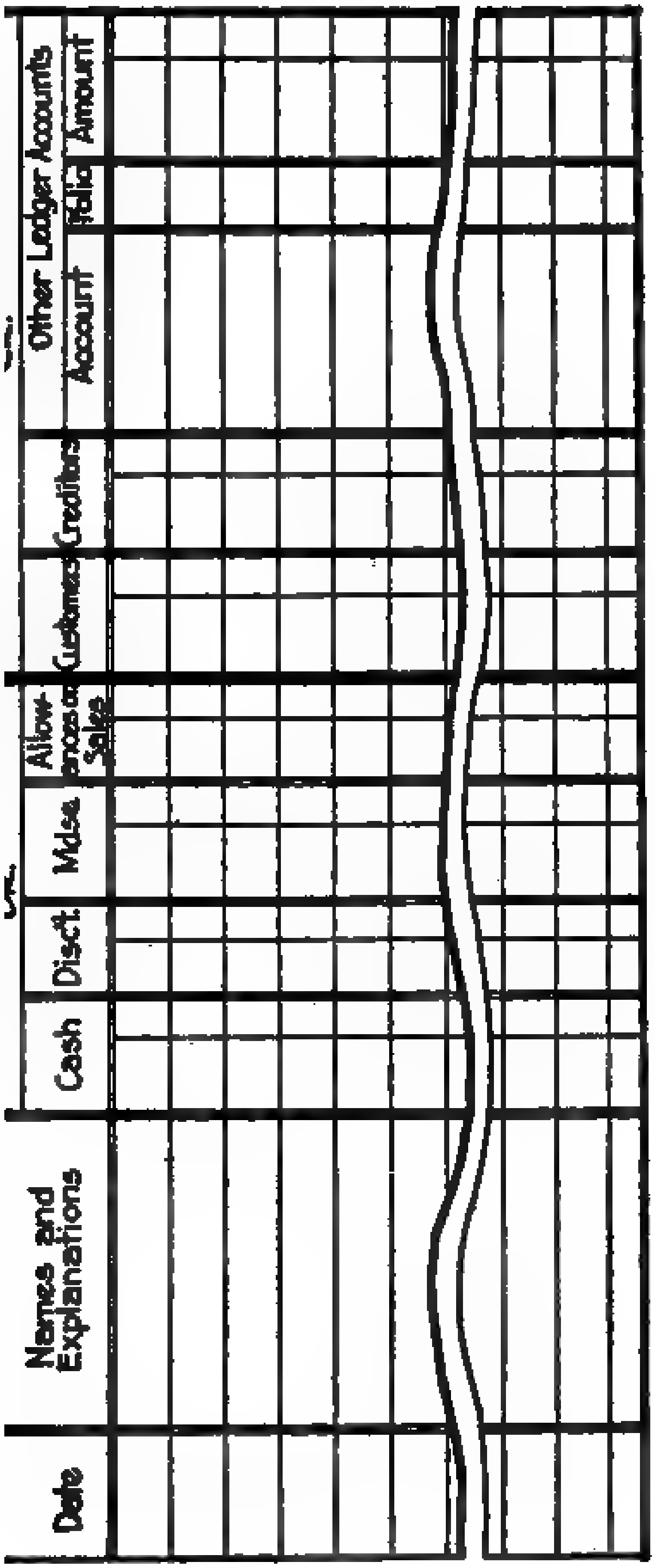


Figure 14. Cash Journal (debit side)

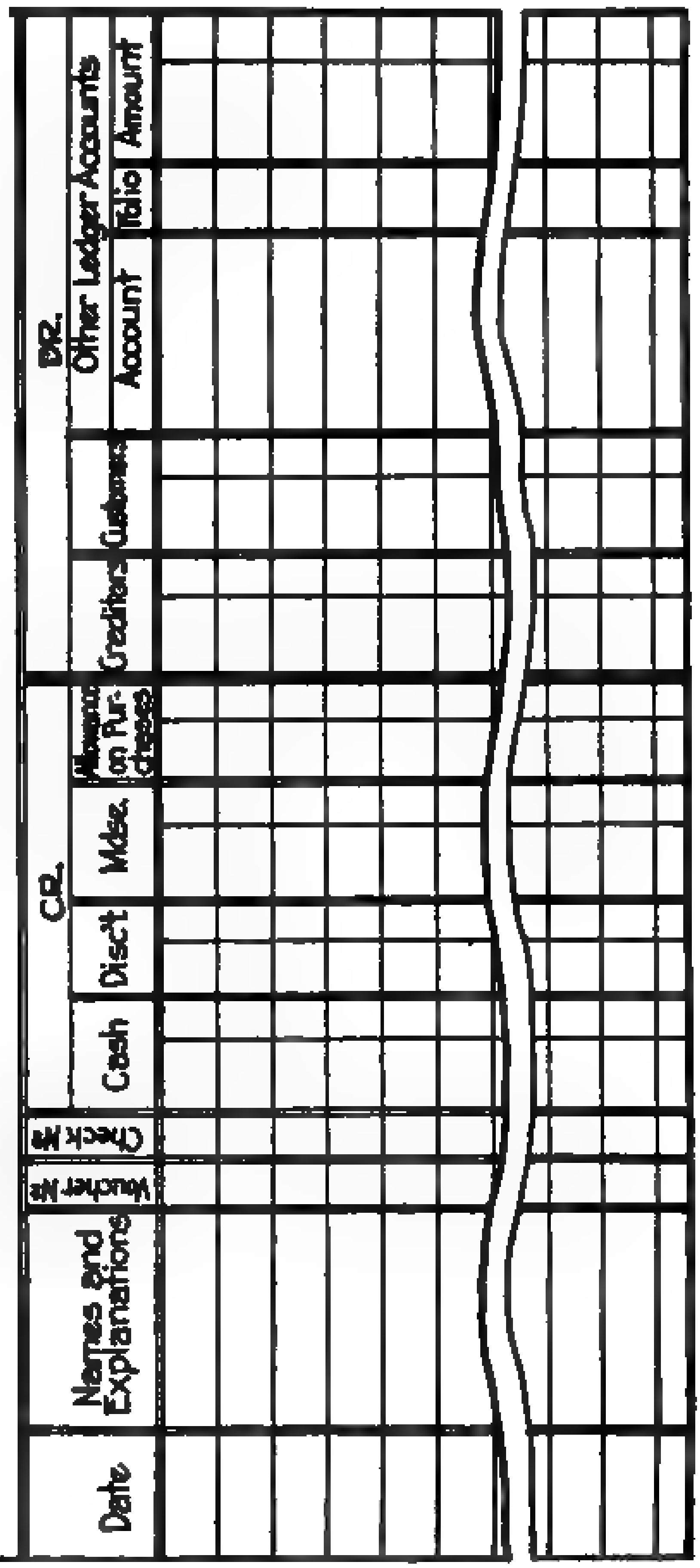


Figure 15. Cash Journal (credit side)

accounts to be debited and accounts to be credited; and on the other side, columns for accounts to be credited, and accounts to be debited. This journal, like all others, is capable of limitless extensions to suit particular cases.

Petty Cash Book

When used by the cashier as a memorandum of petty disbursements, the petty cash book has no particular anatomy. All it is intended to do is to record faithfully the cash transactions which, while small in amount, occur so frequently as to make their daily posting a matter of inconvenience. The disbursements may be recorded in the petty cash book in any way which is deemed satisfactory. Monthly or oftener, an analysis is made which forms the basis of an entry (properly supported by vouchers) to appear in the general cash journal.

When used in connection with all disbursements made otherwise than by check, the petty cash book may become a journal in the true sense of the word and be used as a posting medium, in so far at least as the disbursements are concerned. It is, in this case, nothing more than a portion of the general cash journal assigned to disbursements for petty expenses.

Under the "imprest fund" system of providing for petty cash disbursements (of which we will speak later) a book such as shown in Figure 16 could be used to advantage; it would not, however, be treated as a posting medium, but as an analytical record from which the required data could be readily obtained.

Notes and Bills Journal

With the possible exception of the pay-roll book, which is discussed later, the recorder of the notes and bills receivable and payable is probably the book of orig-

IRNAL

OOK)

RECEIPTS			DISBURSEMENTS										
							Distribution						
											Other Accounts		
Date	Vouch. or No.	Amount	Date	Names and Explanations	Vouch. or No.	Cash	Stable Exp.	Telephone Telegraph	Stationery Printing	Car Fare	Account	Fol.	Amount

Figure 16. Petty Cash Journal

NOTES AND BILLS JOURNAL

NOTES AND BILLS RECEIVABLE SECTION

Date		Maturity			Names					
Of Issue	Of Receipt	Year	Month	Day	Maker or Drawer	Drawee or Acceptor				Continued below

Figure 17. Notes and Bills Journal (receivable section)

NOTES AND BILLS JOURNAL
NOTES AND BILLS PAYABLE SECTION

Date				Names					
	of Maturity								
Of Issue	Year	Month	Day	Maker or Drawer	Drawer or Acceptor	Payee	Indorsers	For what issued	Where payable
									Continued below →

Amount								Disposition			
Cr.	Dr.							Paid at Maturity			
Notes & Bills Payable	Creditors			Interest on Notes & Bills Payable	Other Accounts				Amount		
	Name	Folio	Amount		Name	Folio	Amount	Date	Principal	Interest	Remarks

Figure 18. Notes and Bills Journal (payable section)

inal entry which suggests in the least degree the idea of the journal. This may be due to the facts: first, that a great deal of the information which it contains is purely statistical, and in no way related to journalizing; second, that the data concerning the disposition of the notes prior to, or at, the time of their maturity, are also reflected by the cash journal and posted therefrom; third, that, generally speaking, bookkeepers use the book merely as a memorandum which gives the facts necessary for the monthly recording in the general journal of the transactions in promissory notes. Still, irrespective of the great value which it derives from the thorough character of the information which it is capable of giving, the notes and bills journal, when properly constructed, constitutes an excellent posting medium for transactions involving the receipt or issue of promissory notes.

It will be seen from Figures 17, 18 that the notes and bills book is essentially a journal, since under the heading "Amount" it provides:

1. In the Notes and Bills Receivable section, for:

   Debits to:

   a. "Notes and Bills Receivable" (asset account)

   Credits to:

   a. Customers who have executed or assigned the notes

   b. The interest carried by the notes, and added to the amount of principal which settles for the customers' indebtedness

   c. Other ledger accounts which might be affected by the incoming of a promissory note

2. In the Notes and Bills Payable section, for:

   Credits to:

   a. "Notes and Bills Payable" (liability account)

   Debits to:

   a. Creditors in whose favor the notes are executed
   b. The interest (if any) carried by the note on its face
   c. Other ledger accounts which might be affected by the outgoing of a promissory note

Pay Roll Journal

In its simplest form, and when used by concerns which do not keep their books on the accrued basis, and whose organization is not departmentalized, the pay-roll book can hardly be said to be a journal, since it merely states the names of the employees, and the amounts earned by them during a given period. (See Figure 19.)

In such cases as the above, the book is merely a memorandum record, gathering weekly or monthly, the details which will support the entries appearing in the cash journal to the credit of cash and to the debit of office salaries, or such other accounts as are indicated by the analysis of the pay-roll book in so far as official capacity is concerned.

When, however, departmental organization exists and when, besides, the accrued liabilities (or assets) are placed on the books at the end of each weekly or monthly division of the accounting period, the pay-roll book may be developed into an invaluable book of original entry. (See Figure 20.)

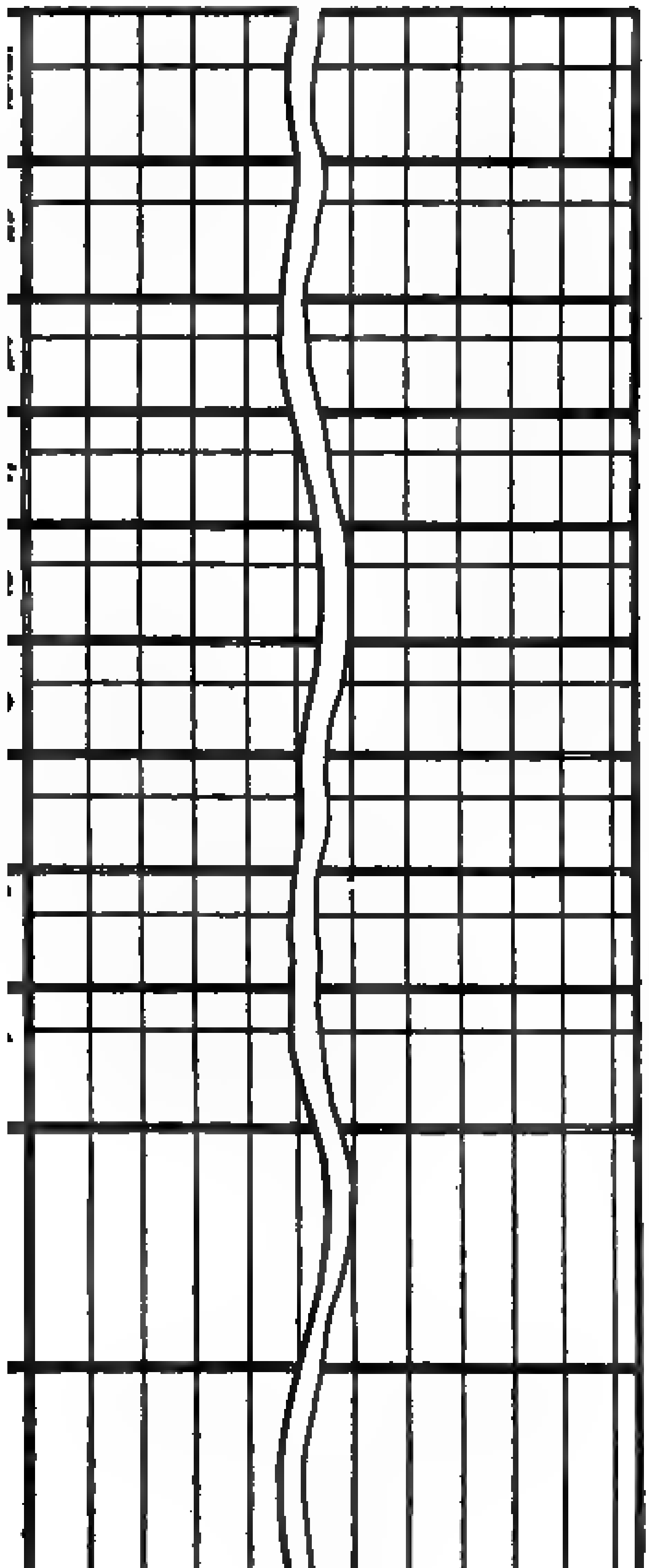
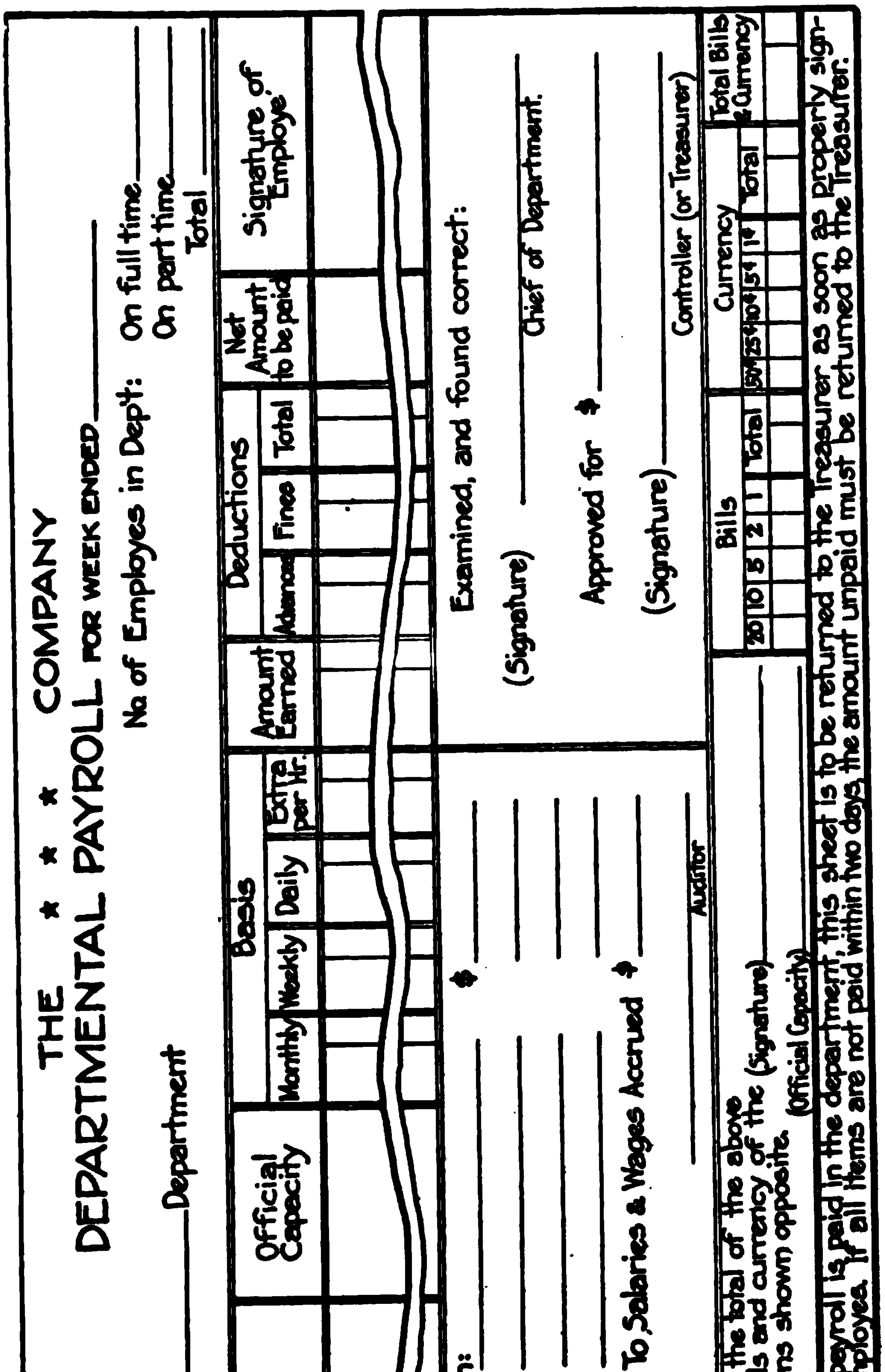


Figure 19. Pay-Roll Journal—Simple Form

Names	Official Capacity	Basis	Rate	To Mar. 2	To Mar. 9	To Mar. 16	To Mar. 23	To Mar. 30	Monthly Total – Distribution: Cr. Salaries & Wages Accrued	Dr. Office Salaries	Dr. Storage Expense	Dr. Packing Expense	Dr. Stable Expense	Dr. Cartage Expense
Office														
John Doe	Chief Clerk	Monthly	200.00						200.00	200.00				
Wm. Roe	Bookkeeper	Weekly	35.00	35.00	35.00	35.00	35.00	35.00	175.00	175.00				
	Total													
Storage Dept.														
Wm. Knox	Manager	Monthly	900.00						900.00		900.00			
J. Vermont	Assistant	Weekly	45.00	45.00	45.00	45.00	45.00	45.00	225.00		225.00			
	Total													
Packing Dept.														
J. Roland	Foreman	Weekly	15.00	15.00	15.00	15.00	15.00	15.00	75.00			75.00		
L. St. John	Packer	[illegible]	2.00	4.00	12.00	12.00	13.00	12.40	53.40		* 12.00	41.40		
	Total													
Etc.	Etc.													
	Total													
Etc.	Etc.													
	Monthly Total													
									* Used on work in Storage Dept.					

Figure 20. Pay-Roll Journal



THE * * * COMPANY

DEPARTMENTAL PAYROLL FOR WEEK ENDED ____

Department ____

No. of Employes in Dep't: On full time ____ On part time ____ Total ____

Name	Official Capacity	Basis				Amount Earned	Deductions			Net Amount to be paid	Signature of Employe
		Monthly	Weekly	Daily	Extra per Hr.		Advances	Fines	Total		

Distribution: $ ____

To Salaries & Wages Accrued $ ____

Auditor

Examined, and found correct:

(Signature) ____ Chief of Department.

Approved for $ ____

(Signature) ____ Controller (or Treasurer)

I require the total of the above payroll in bills and currency of the denominations shown opposite. (Signature) ____ (Official Capacity)

Bills						Currency						Total Bills & Currency
20	10	5	2	1	Total	50¢	25¢	10¢	5¢	1¢	Total	

Note: If payroll is paid in the department this sheet is to be returned to the Treasurer as soon as properly signed by the employes. If all items are not paid within two days the amount unpaid must be returned to the Treasurer.

Figure 21. Pay-Roll Journal—Departmental

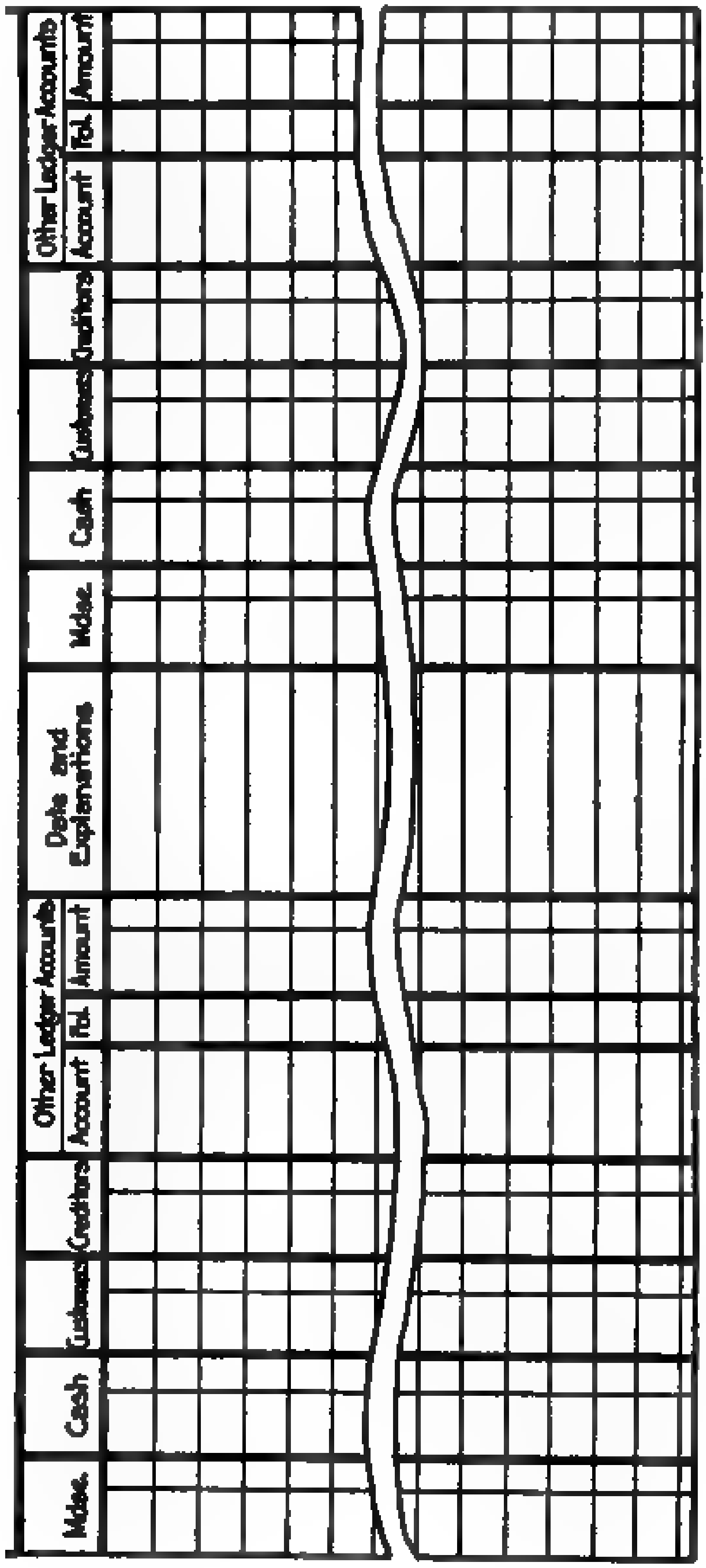


Figure 22. Special Column Journal

The pay-roll journal shown in Figure 20 is designed for a warehouse. During certain seasons, certain departments are very active, while others are slack; the men of one department may be put to work in other departments. This necessitates the distribution columns, which are so headed as to show the ledger account to which the total of the items appearing therein, will have to be debited.

The adaptability of the pay-roll journal to the requirements of the treasurer's department, is illustrated by Figure 21. The form is supposed to be "loose-leaf" and used by concerns which find it convenient to have the employees paid in the department in which they work.

Specially Ruled Journals

One sometimes finds, in certain businesses, journals providing on either side of the space allotted to the explanations of the entries, special debit and credit columns in which are entered the names of the active accounts, one column being reserved for inactive ledger accounts. These books are sometimes referred to as day-book journals, because they unite in a single book, the original blotter, that is to say, the chronological and historical records, and all the components of the original journal in which the data of the blotter used to be classified.

CHAPTER IX

THE FINANCIAL BOOKS—THE LEDGER AND VOUCHER RECORD

The Structure of the Ledger

The ledger has been aptly called by the Italians "Libro Maestro." It is, indeed, the master book, or the book of the master of the business; the proprietor should be able to find in it the synthetic grouping of the analytic labor of the journal.

We have referred to the journal as "the scales" in which the transactions are weighed and classified as between debits and credits. We might compare the ledger to a chest of drawers, each unit of which is divided into two vertical sections, the left being known as the debit side, and the right, as the credit side. Each drawer is given a name indicative of the subject matter which will be placed therein as soon as the iournal has classified the transactions.

In order that information concerning the contents of each drawer may be readily obtained, each side of it is subdivided into four compartments of unequal dimensions, intended to contain:

1. The date of the transaction
2. The explanation or name of the value which the journal has classified as the counterpart of the one to be placed in the particular drawer in question

3. The particular journal scales which attended to the weighing of the transaction as a whole
4. The money value of every item

Thus we have the ledger account form which usage has consecrated:

Name of Account*							
Dr.				Cr.			
Date	Explanation	Reference	Amt.	Date	Explanation	Reference	Amt.

Variations of the Standard Ledger

Every book of accounts which is built upon lines similar to the ruling given above for the ledger account, is said to be "ledger-ruled."

A slight alteration of the conventional frame has been made in what is generally known as "The Boston Ledger," and, less commonly, as "The Bank Ledger." This book is the result of the demand of certain types of financial organization for daily balances; it places the credit column alongside of the debit column, and introduces a third column for balances. The accounts are arranged, according to individual preference, one, two, or four to the page. An example is given in Figure 23.

* In practice, the headings appearing in the columns are omitted.

Figure 23. Boston Ledger

Accounts				DR.					CR.						
No.	Names and Addresses	L.F.	Initial Balance	Storage	Cartage	Moving	Packing	Total	Cash	Allow-ances	[illegible]	Profit & Loss	Total	Closing Balance	
1	John Doe														
2															Binding
3															Space
4															
5															
	Total														
	Total														

Figure 24. Boston Ledger—Special Form (master sheet)

Storage warehouses, dairies, real estate agencies, and other businesses whose clients and patrons are many, but in which the monthly transactions are comparatively few,

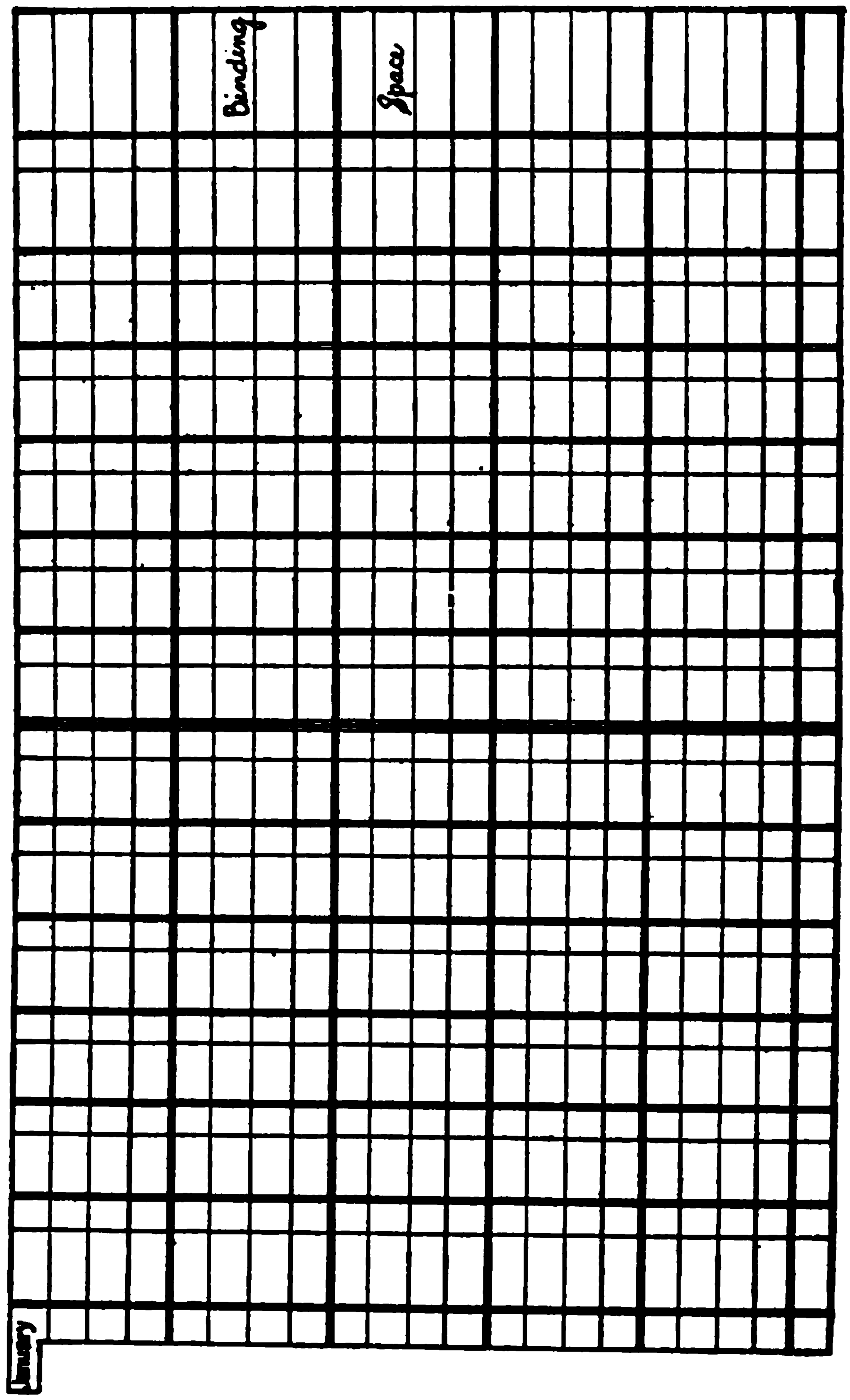


Figure 25. Boston Ledger—Special Form (short sheet)

have developed the Boston ledger to such an extent that, if an error occurs in the posting, it will be located at once by comparing the footings of the ledger columns with

those of the corresponding columns of the specially ruled journal. The ledger so developed (Figures 24, 25) is a loose-leaf book, composed of long sheets and short sheets, containing, according to the importance of the accounts to be carried, one, three, five, ten, or twenty accounts to the page.

The long sheets are used as form sheets and contain the number of the customer or client, his name and address, and the headings of the different spaces and columns. The short sheets are six in number for every long sheet and contain neither names nor headings. One side of each sheet is used for one month. Each sheet begins with the initial balance for the month, and ends with the closing balance for that month, the debit and credit transactions being given as many columns as there are possible classes of charges or credits. Each account can be added monthly, both horizontally and vertically. The footings of each column of each and every one of the three, five, ten, or twenty accounts which the page contains, are added at the end of the page, and reflected monthly by a special recapitulation sheet, the totals of which must agree, by columns, with the footings of the corresponding columns of the books of original entry.

The great advantages claimed for the book are:

1. It permits of monthly customers' statements being made by the bookkeepers without reference to books of original entry.
2. If the customers ledgers do not agree with the controlling account in the general ledger, the differences can be traced at once to the particular column where they originated, by comparing the results of the sundry columns of the customers ledgers with the sundry columns of the books of original entry.

3. In connection with the current ledger, there is kept a "transfer ledger" which, being provided with duplicate long sheets, keeps in any single book, for as many years as may be required, the monthly history of all the transactions with all customers.

Private Ledger

If the business is of such a nature as to make it advisable to prevent the employees from obtaining connected information concerning its various phases, the general ledger is relieved of all the facts which it is desired to keep secret. The vital data are kept in a private ledger which is posted by the head of the concern, the auditor, or a confidential clerk, from the results of the books of original entry. The book is placed in equilibrium by adding to the accounts, with such values as it contains, an account known as "General Ledger" which is debited (or credited) with the net of the values recorded by the latter book. Equilibrium is maintained by debiting or crediting the General Ledger account with the net of the fluctuations of the values which it contains.

If the facts to be kept secret relate to profits, it is likely that the books of original entry will be made as little analytical as possible. It is also probable that analyses will be made by the keeper of the private ledger, and their results entered in a private journal.

In what is left of the general ledger, there is kept an account with the private book, which is debited with the same amount with which the private ledger credits the general ledger, and vice versa. The following illustration will show the operation of the private ledger and the relation of that book to the general ledger. This is especially exemplified by the presentation of the general ledger accounts as they would appear if no private ledger were kept

PRIVATE LEDGER OF A. B. C. PARTNERS
TRIAL BALANCE
(After closing)

Plant & Equipment....	$20,000.00	Capital—A	$15,000.00
Furniture & Fixtures..	3,000.00	Capital—B	16,000.00
Drawings—C	4,500.00	Capital—C	22,000.00
Special Deposits.......	10,000.00	Undivided Profits......	28,000.00
Patents	20,000.00		
Investments	8,000.00		
General Ledger........	15,500.00		
	$81,000.00		$81,000.00

GENERAL LEDGER OF A. B. C. PARTNERS
TRIAL BALANCE
(After closing)

Cash & Petty Cash...	$ 7,100.00	Mortgage Payable......	$ 7,000.00
Inventory of Mdse.....	10,000.00	Accounts Payable...... (Individual accounts kept in creditors ledger)	23,680.00
Customers .... (Individual accounts kept in customers ledger)	34,680.00	Notes Payable.........	5,000.00
		Wages Payable........	600.00
		Private Ledger........	15,500.00
	$51,780.00		$51,780.00

GENERAL LEDGER OF A. B. C. PARTNERS*
TRIAL BALANCE
(After closing)

Cash & Petty Cash....	$ 7,100.00	Capital—A	$ 15,000.00
Plant & Equipment....	20,000.00	Capital—B	16,000.00
Furniture & Fixtures..	3,000.00	Capital—C	22,000.00
Inventory of Mdse.....	10,000.00	Mortgage Payable.....	7,000.00
Customers	34,680.00	Accounts Payable......	23,680.00
Drawings—C	4,500.00	Notes Payable.........	5,000.00
Special Deposits.......	10,000.00	Wages Payable........	600.00
Patents	20,000.00	Undivided Profits......	28,000.00
Investments	8,000.00		
	$117,280.00		$117,280.00

* On the assumption that there is no private ledger.

Voucher Record

Originally a columnar purchase journal, this book has been so altered and extended, that it is not uncommon to hear accountants refer to it as a combination of the purchase journal and creditors ledger.

If we decline to give the name "ledger" to any record other than the time-honored book bearing that title, it may still be admitted that the voucher record seems to combine two books. It is, in fact, generally true that where it is used, no creditors ledger, as such, is kept.

Upon close examination of the mechanism of the voucher record, we find that it differs from the analytical purchase journal only in that it provides for the recording of the amount paid to the creditors and, in some cases, for the discounts gained at settlement. Investigating further, we find that the forms usually submitted by writers and by practising accountants fail to support the claims made for them, since they do not provide for returns, allowances, and other deductions which are likely to be made on the face of a bill at settlement. Nor do they provide for settlement by promissory notes, to say nothing of the many other complications which may arise. We must realize then that, in connection with the voucher record, there must be kept memoranda in some form whereby the status of the account of each creditor may be readily ascertained. Whether such memoranda are kept on cards or on ordinary pieces of paper systematically filed, or whether they are kept in a bound book or loose-leaf book, is as immaterial as the name which is given to them or to the file which contains them. No matter what the system adopted may be, it is to all intents and purposes a ledger. The name ledger could be given to a vertical file; as a matter of fact, nothing comes so near to being an ideal ledger as the card files kept by life insurance companies in connection with the premiums

Figure 26. Voucher Record

collected, overdue, collectable, and uncollectable under the policies which they have issued.

The most elaborate voucher record which ingenuity could devise, would fail as utterly as a creditors ledger, as did the original journal. In this latter book there can be found, if one were tempted to look for them, all the names of the creditors of the business, together with the amount of the indebtedness towards them which each individual transaction brought about, and the exact detail of the settlements made with them. But it was precisely because no one would ever have time or patience to analyze the record in order to find the true status of any given creditor, that the creditors ledger came into existence.

The voucher record is a very useful book, in that it discloses the amount of vouchers payable which were received from all sources during the month and provides for the distribution of that amount, whether to the classes of materials purchased, or to the individual accounts raised to analyze the expenses of the period; it can even be made to reflect the true status of that liability at any time during the accounting period, as well as the sundry steps which have been taken to incur it and to reduce it. The book is undoubtedly the highest expression of that power of analysis with which books of original entry have been credited. But there is a limit to its usefulness, and to claim more for it than it can do, is to mislead the student of accounting and the business man.

CHAPTER X

THE TECHNIQUE OF POSTING

Functions of the Ledger

Under the word "Post" the Encyclopædic Dictionary gives the following: "Bookkeeping: (1) To carry or transfer (as items, accounts) from a journal to a ledger. (2) To make the necessary or proper entries in: as, To post one's books." And under the word "postil" it says: "An explanatory or marginal note * * * especially one written in a margin; a commentary."

The above definitions show that items appearing in a journal (or book of original entry) must be carried to proper accounts in the ledger, sufficient marginal notes, or commentaries, being made in order to render the entry self-explanatory. From what has been said in the foregoing chapter in connection with the ledger account frame, it seems that the proper place for these marginal notes, or commentaries, is the space allotted to the date, the explanation, and the reference to the journal and journal folio from which the entry comes.

If the ledger is used with due respect for the purpose for which it was created, each individual account affords invaluable information in regard to:

1. The particular value referred to by the name
2. The positive and negative (Dr. and Cr.) fluctuations of the value
3. The counterpart of every side of the value and of every item on each side, and, in certain cases—

4. The causes which have brought about the increases and the decreases

If, however, the information which the frame of the account provides for, is omitted or is carelessly stated, the ledger loses its value, and becomes a mere index of the monetary importance of transactions, and of their location in books of original entry.

Rules for Posting

The rules which accountants would like adopted in regard to ledger explanations are as follows:

1. When debiting or crediting an account, give in the space allotted to explanations the name of the account which is credited or debited as a result of the transaction.
2. When debiting or crediting an account with an amount representing credits or debits to several accounts, insert the word "Sundry" in the place reserved for explanations.
3. Refer clearly to the journal from which the entry comes.

The meaning of a ledger account kept in accordance with the above rules, is readily understood by the layman, and in a great many cases the surface information which the book affords will be quite sufficient to satisfy the requirements of the proprietor of the business. The only accounts which he needs to investigate further, if detail is required, are the ones containing the explanation "Sundry." If, on the other hand, the ledger shows amounts only, or abbreviated explanations which only the bookkeeper can understand, it is of no value to the proprietor. Bookkeepers are generally interested only in methods and devices which save them personal effort; they are apt to forget that they were not engaged to make their work

easy, but to keep books in such a manner as to make them valuable to the employer.

In this connection, it must be said that bookkeepers who do not respect well-established principles of bookkeeping because they are personally unable to see the basis on which they rest, have robbed the double-entry method of a great deal which was valuable, and are responsible for the lack of illuminative information which so many modern books reveal upon close investigation.

CHAPTER XI

CONTROLLING ACCOUNTS

General and Subsidiary Ledgers

Inasmuch as the establishment of ledger controls has resulted from the evolution of the journal, and for the further reason that the whole theory of controlling accounts rests more upon a question of mechanism of books than upon a question of principles, it may be well to make the controlling accounts serve as a connecting link between the theory of the books and the general classification of the accounts which the books contain.

Ledgers are frequently referred to as "general" and "subsidiary" (or "underlying"). The word general, when applied to a ledger, means that the book contains one account with every value, whether positive or negative, which is part of the business as a whole. If, then, subsidiary ledgers are used, it must be that some of the general ledger accounts require to be kept more minutely than can conveniently be done in the general book. In large concerns, for instance, there is sometimes kept a real estate ledger in which every parcel of land and every building held for investment is given an account of its own, while the aggregate amount of the property then held is carried in the general ledger. The same thing may be done in connection with bonds and stocks of other companies, machinery and tools, materials and supplies, and, generally speaking, with any account involving a variety of detail. Therefore, the term "Controlling

Account," which is given to ledger accounts recording the aggregate of transactions the detail of which is kept in other books, applies to a multitude of cases. More commonly, however, the term "controlling" is associated with accounts which show the extent of the transactions with customers and creditors, as shown in detail by the subsidiary ledgers.

Genesis of the Controlling Account

It will be readily admitted that even before the journal was divided into its integral parts, it was possible, for balance sheet purposes, to obtain the net amount due from customers, even though the general ledger was not entirely posted, or was out of balance. An analysis of the journal, if accurately made, would give the sales, the returned sales, and allowances, as well as the settlements made by customers and the losses of discounts which they involved. But the process was lengthy, and the delay might prove irksome to the administrative body, whose demand for accurate and timely information concerning financial facts was growing apace with the development of the business.

The analytical results given by the books of original entry which were subsequently built up from the journal root, made it possible to obtain, not only the minutest detail of every transaction, but, as well, periodical totals of broad classes of facts. This pointed the way towards the partial reconstruction of the general ledger. Everything which compelled the handling of a mass of detail and retarded the obtaining of financial statements, was taken bodily out of the general ledger and transferred to subsidiary books where it could be conveniently handled by clerks less skilled in the science of accounts than the general bookkeeper. To the latter was assigned the task of controlling the work of his subordinates. He gathered

his facts monthly from the books of original entry; hence, if he were certain of the arithmetical accuracy of the data reflected by the said books, he could not only arrange his material quickly for statement purposes, but could establish as well the aggregate amount of the individual accounts, the detail of which was to be shown later by the lists of balances taken from the subsidiary ledgers. Nor did it matter, as far as financial status was concerned, whether or not the subsidiary books agreed with his controls. The statements were made at all events, and known to be correct, since the general ledger was in balance.

Theory of the Controlling Account

Thus it was, that the controlling accounts came into existence. Basing our definition of them upon their origin, we might say: The term "controlling" applies to ledger accounts which, by means of the periodical recording of the aggregates of debit and credit transactions shown by books of original entry, measure the periodical status of certain broad classes of financial facts and, at the same time, control their detail posting in subsidiary books.

The process of transferring to subsidiary books, accounts which are to be controlled by, instead of being kept in, the general ledger, does not involve any unusual knowledge of accounting principles; still, the type of journal entries necessary to create controlling accounts for customers and creditors, and, more generally, all journal entries which necessitate a posting to the general ledger and another posting to underlying ledgers, are confusing to the student of accounting; they appear to him to be three-sided, and destructive of that equilibrium on which, as he has been told, the whole system of double entry rests. Take the case of a journal entry creating a customers' controlling account, for instance:

Names and Explanation	References C. L.	G. L.	Dr.	Cr.
Customers' Controlling Account.....		25	$3,000.00	
A (Name of Customer).......	1	75		$ 500.00
B "	2	80		150.00
C "	3	85		100.00
D "	4	89		75.00
E "	5	91		925.00
F "	6	97		1,250.00
To close, in the general ledger, the individual accounts of the above customers, and transfer the aggregate to the controlling account. The individual accounts are to be carried in a subsidiary ledger to be known as customers ledger.				

The journal provides for a debit to the controlling account, and a credit to each individual account to be closed; this, in effect, means that the equilibrium having been disturbed by the debit, is reëstablished by the credit; but another debit to each individual customer's account must be made in the underlying ledger to open the individual accounts. The student is unable to find a balancing credit therefor, and begins to believe that the whole theory is erroneous. A few words of explanation may serve to dispel such doubts, as well as to review some of the principles expressed in the preceding chapters.

All financial books are either journals or ledgers; the journal may be kept in its entirety, or it may be cut up into its component parts, but whether found under one form or the other, it is nevertheless the journal, and its nature and its importance do not change. The ledger may also be cut up in as many parts as may best be adapted to the requirements of the business; for instance, there might be a section for impersonal assets, another for impersonal liabilities and capital, a third for nominal accounts, and a fourth for personal accounts of customers

and creditors; one-half of this last section being personal assets, the other half being personal liabilities. To illustrate:

General Ledger in Four Sections			
Impersonal Assets	Impersonal Liabilities & Capital	Nominal Accounts, Debits and Credits	a. Personal Accounts — Customers' b. Personal Accounts — Creditors'
1.	2.	3.	4.

This would not make parts 2, 3, or 4, subsidiary ledgers; it would merely make them units of the whole. But if we were to add the balances shown by the individual accounts in part "a" of section 4, and enter the total thus obtained, among the assets found in section 1; if, further, we were to do the same thing with the accounts found in part "b" of section 4, and embody the amount in section 2, we would have:

General Ledger			Subsidiary Ledger
Impersonal Assets and Control of Personal Assets	Impersonal Liabilities, Capital and Control of Personal Liabilities	Nominal Accounts	a. Personal Accounts—Customers' b. Personal Accounts — Creditors'
1.	2.	3.	

Thus, we would find in section 1 an account controlling part "a" of the subsidiary ledger, and in section 2 an account controlling part "b" of the subsidiary ledger.

It becomes plain that (since the journal establishes and maintains the equilibrium between the positive and negative values found in the general ledger), when we say that two postings must be made of every debit and of every credit entry affecting the controlling account of the customers or of the creditors, we mean that one of the postings is necessary to show that the equilibrium has been disturbed and reëstablished, owing to the occurrence of certain transactions, and that the other posting is merely in the nature of a memorandum, involving no principle of any kind, and intended merely to contribute to the gathering of facts which, in the aggregate, will support other facts expressed elsewhere in concrete form.

Self-Balancing Ledger

One of the indirect applications of the controlling accounts is found in what is sometimes qualified as a "self-balancing ledger." Taking the customers ledger as an instance, the bookkeeper operating a self-balancing ledger of the customers' accounts, is supposed to post daily the details of the transactions affecting them individually, and when this is accomplished, to post the total of the said transactions into a "control" to which a special place is given, either at the beginning or at the end of the book. It goes without saying that the data which constitute the "control" posting, are supposed to be taken independently of the detail. Monthly, or oftener, the bookkeeper is in a position to control his own work, since the special account gives him the aggregate amount which the open balances of the individual accounts must reflect and support.

It must be remarked, in connection with the self-balancing ledgers, that if the subsidiary "controls" are really what they claim to be, they reduce the general ledger accounts which usually operate in the capacity of

controllers, to the rank of aggregate asset or liability accounts, that is to say, mere memorandum accounts.

The accounts which the private ledger and the general ledger keep one with the other, are sometimes qualified as "controlling." The same is true of the general ledger and of the income ledger. This, however, is contrary to principles. We have seen that the effect of a controlling account is to eliminate from the general ledger the detail of what was originally a part of that book, and that the part thus removed becomes a subsidiary unit of the accounting scheme. Few accountants would be willing to say that the general ledger is a subsidiary of the private ledger because the latter contains a controlling account with the former, and that, for the same reason, the private ledger is a subsidiary book of the general ledger. In reality, the accounts which one section of the ledger contains with other sections of the same book are not controlling accounts, but balance accounts, precisely as the would-be "control" of the self-balancing subsidiary ledger is only a balance account.

CHAPTER XII

CLASSIFICATION OF ACCOUNTS

General Classification

For purposes of general classification on the basis of financial status and earning capacity, accounts are classified as:

1. Real Accounts { Personal Accounts; Impersonal Accounts }
2. Nominal Accounts { Fictitious, Economic, Loss and Gain, Representative Accounts }
3. Accounts Partially Real and Partially Nominal

1. Real Accounts

Accounts are said to be real when they represent positive or negative elements of invested values, the net amount of which measures the equity of the proprietor in positive values. In other words, the real accounts are all the assets and the true liabilities, the latter term excluding accounts expressing proprietorship, accounts of sole traders, and accounts of copartnerships. Liabilities resulting from, or incident to, the issue of capital stock, are real liabilities, as will be seen later, when speaking of capital stock.

Real accounts are subdivided into personal and impersonal. The personal accounts include all the accounts with persons, whether such persons have an individual account in the general ledger, or whether the aggregate of their accounts is reflected by a controlling account. The term "impersonal" applies to all other real accounts.

2. Nominal Accounts

The term "nominal" applies to all accounts opened during the accounting period to record the causes for such fluctuations of real accounts as have resulted in an operating loss or gain, an expense, an addition to, or a deduction from, income. They are called nominal because, in so far as inventorial value is concerned, they exist in name only. Cash, buildings, land, are called real, because they exist in some tangible form; good-will is called real, because, although intangible, it has or is supposed to have a salable value; interest (received or paid otherwise than in advance) is called nominal, because it represents no inventorial value, tangible or intangible, positive or negative. Interest merely gives the result of a series of transactions the effect of which has been to bring about the income or the outgo of a value (cash or claim) in exchange for financial assistance given or received.

The term "fictitious" which is sometimes applied to nominal accounts is objected to by many accountants, because of the generally accepted meanings of the word, i.e., imaginary, false, not genuine, fabulous, etc. It is not easy to see how misleading accounting terminology can in any way make clear to the student the principle underlying the nominal accounts.

The term "economic accounts" is also given to nominal accounts. The word economic means: pertaining to the management of the household, the state, the nation, the business, etc. And as it is through management that gains are made, losses sustained, and expenses incurred, it follows that every account recording such occurrences may rightly be termed economic.

The expression "loss and gain accounts" is open to the objection that it tends to obscure principles by conveying the idea that expenses are losses. "Salaries," for ex-

ample, which some textbooks call a loss and gain account, is not a loss, but an expense necessary to obtain for the business the benefit of the services which it requires. To call expenses losses, is to ignore one of the main purposes of accounting, which is to differentiate between them.

The word "representative" is also sometimes used in connection with the accounts which show causes. It is said of them, to explain the use of the term, that they "represent" the particular subject matter which their name indicates. Thus, rent is called a representative account, because it represents the transactions relating to rent.

3. Accounts Partially Real and Partially Nominal

The assets of a concern may be said to be invested, or acquired:

1. To remain permanently invested in the business and serve as a basis for operations
2. To be used as current resources, that is to say, as financing media
3. To be sold at a profit, either in the very form in which they were invested or acquired, or after they have been subjected to a process altering their nature
4. To be consumed pending operations, for the benefit of the business as a whole

Groups 1 and 2 are real values at all times, and the fluctuations to which they are subject are accounted for by nominal accounts in all cases where the fluctuations have resulted in increases or decreases.

Group 3 contains elements which, under certain methods of accounting, may be partially real and partially nominal. If, for instance, a merchandise account is kept,

it contains a real element the value of which is ascertained only at inventory times, and a nominal element the extent of which is known as soon as the real element is obtained. Of this, more will be said later.

As to group 4, if the items which it contains are shown by inventory to have been consumed entirely, the accounts representing them have ceased to be partially real, and have become essentially nominal. If they are shown not to have been entirely consumed, their inventorial value is real, the consumed proportion is nominal, and the accounts must be relieved of either the real or the nominal elements, as will be shown subsequently.

Asset and Liability Classification

For purposes of recording and expressing the financial status of a business, accounts are classified as:

1. Asset Accounts, including:
   All real values actually possessed, or earned and receivable, as well as all prepayments applicable to periods subsequent to any particular period
2. Liability Accounts, including:
   a. For Corporations:
      (1) The liabilities to outsiders
      (2) The liability of the artificial being "The Corporation" to the stockholders, at time of dissolution, for:
         (a) The outstanding capital stock
         (b) All the surplus earnings not declared in dividends
         (c) The income and the benefits held out of surplus, for application to the profits of subsequent periods
         (d) Unapplied reserves

b. For Sole Proprietorships and Copartnerships:
   (1) The liabilities to outsiders
   (2) The proprietorship accounts, represented by:
      (a) Capital accounts
      (b) Undrawn, undistributed, or unapplied profits
      (c) All credit accounts which do not constitute liabilities to outsiders, whether reserves unapplied or personal credit accounts

Assets and Asset Accounts

The word "asset" comes from the French word "*assez*" or from the Provencal "*assatz*," both meaning "enough" or "sufficient." Commenting upon assets, Blackstone says that "the term receives its name because its possession is sufficient to render the executor or administrator liable to discharge the debts and legacies of the deceased person, so far as the assets may be sufficient for the purpose."

The report of the special committee of the American Association of Public Accountants, on accounting terminology, defines assets: "Property, fixed or liquid; resources of any kind capable of being converted into money or value. The term is used sometimes as applying to good-will, concessions, franchises, deferred charges, and in English accounting even to preliminary expenses incurred in the formation of a company." Greendlinger's "Accounting Practice" states broadly that "any part of a man's property or business that may be used for the extinction of his debts is called assets." Bentley's "Science of Accounts" speaks of assets in these terms: "The assets of a business are anything of value belonging to it, such as real estate, ma-

chinery, horses and wagons, office furniture, book debts, notes receivable, merchandise on hand, insurance premiums paid in advance, etc."

The accounting meaning of the word "assets" does not appear capable of being reduced to general definitions like the above, for values may be assets under certain conditions and not under others; nor is it necessary that a value "may be used for the extinction of a man's debts" in order that it may be raised to the dignity of an asset. Stationery and printed matter, for instance, are often referred to as assets of a going concern; still they might have no value available for the liquidation of any of the debts of the business. It seems, then, that the definition of assets might be extended to cover their peculiarities. The term "assets," when this is done, means:

1. For a going concern:

   That which is owned and invested in the business; that which is earned, although not received, and constitutes a collectable claim; that which has been expended for the benefit of future periods

2. For a concern about to liquidate:

   a. If the concern enjoys the benefit of limited liability:

      That which is owned, invested in the business, and convertible into resources applicable to the liquidation of the liabilities of the concern

   b. If the concern does not enjoy the benefit of limited liability:

      That which the proprietors of the business own and is not exempt by law from being seized and converted into resources applicable to the liquidation of their liabilities.

Asset accounts are the accounts in which are recorded the initial value of assets, and all subsequent transactions affecting them.

Liabilities and Liability Accounts

There is perhaps no term used in accounting which has caused so much discussion as the word liability. According to the revised edition of the Encyclopædic Dictionary, liability means: "The quality or state of being liable, responsible, or bound in law or justice. That for which one is liable; specifically the debts or pecuniary engagements for which one is liable." The report on accounting terminology which has been mentioned in connection with assets, says that "liabilities embrace all the debts or obligations due by the firm to its creditors, or the debts and obligations of a corporation, partnership or individual." Lisle says that "the liabilities of a business consist of all the sums due to outside creditors, as distinguished from the sums due to partners or stockholders."

The foregoing definitions do not appear to take into consideration the manifold phases of liabilities; they seem to ignore the ever-present possibility of accountabilities becoming liabilities as a direct result of the materialization of contingencies.

The liabilities of a going concern may be said to be:

1. Those which are past due.
2. Those which are due, but not as yet payable, in consequence of the terms of credit extended.
3. Those for which indebtedness has been incurred, but which are, at present, neither due nor payable.
4. Those for which the possibility of becoming liable depends upon contingencies of the future.

On the other hand, the word liabilities might be made to apply, for a concern enjoying limited liability, and about to liquidate, to:

1. Those which are due, about to become due, or certain to become due as a direct result of operations, and payable out of the proceeds of the sale of invested assets.
2. Those which will become due if certain contingencies materialize.
3. The remainder of the assets (if any) after liquidation of all liabilities to outsiders, which the proprietors will withdraw from the enterprise, or which the corporation in its capacity as an artificial being about to lose its legal entity, owes to the stockholders.

Lastly, the liabilities of a concern not enjoying the privilege of limited liability and about to liquidate, might be said to be:

> Those which are due, about to become due or certain to become due upon the materialization of contingencies, and are payable out of the proceeds of the sale of any value owned by the members of the concern which is not exempted by law from seizure, whether or not it is invested in the business.

Liability accounts are so named because they record the original amount of the liabilities, and all subsequent transactions in regard thereto.

Part III—The Theory of the Asset Accounts

CHAPTER XIII

CASH ACCOUNT—PETTY CASH

The Theory of the Cash Account

Under the tenets of the personalistic theory of accounts the cash account is, in principle, an account with the cashier. Without going into the merits of that theory, it may be said to have the advantage of restricting the treatment of cash to the recording of actual receipts and disbursements. This may sound like a truism, and it will no doubt be advanced that the same restrictions apply, no matter under what theory the cash account is kept. Still, every accountant knows that a great many ledger accounts with cash contain items which are called receipts merely because they have not been disbursed, and items which are called disbursements merely because they have not been received. It is because this latter treatment is not generally thought to be wrong, that so many students of accounting find great difficulty in solving practical problems which present the cash account of a trustee, without stating as receipts the proceeds of the securities held for creditors and sold for them under the indenture of the pledge, and as disbursements the reduction or the liquidation of fully or partially secured liabili-

ties. It is also because the average bookkeeper does not clearly understand the purpose of the cash account that so many entries are made which deprive the books of a concern of that harmonious relation which should exist between them and the books of all other concerns with which business relations have existed. Let us illustrate the cash account by the following example:

A owes Bank B $50,000, representing a time loan secured by 600 shares of stock, of par value of $100 each, which A carries on his books at $59,500. A being unable to meet the loan at maturity, the bank sells the securities for $57,000, deducts from the proceeds the principal of the loan, plus $1,500 of interest due under the loan, and credits A with the balance, i.e., $5,500.

If we were to examine the books of Bank B we would find, as a result of the foregoing:

Cash	debited with	$57,000.00	
Loans Receivable	credited with		$50,000.00
Accrued Interest on Loans	credited with		1,500.00
A	credited with		5,500.00

If, on the other hand, we were to examine A's books, it is not improbable that we would find:

Cash	debited with	$57,000	
Investments	credited with		$57,000
Cash	credited with		51,500
Loans Payable	debited with	50,000	
Interest Accrued on Loans	debited with	1,500	
Investments	credited with		2,500
Profit and Loss	debited with	2,500	

Whereas, if proper respect had been paid to the purpose of bookkeeping and to the principles underlying the double-entry system, we should have found on A's books:

Cash ....debited with $5,500			
Interest Accrued on Loans ....debited with 1,500			
Loans Payable.........debited with 50,000			
Profit and Loss.......debited with 2,500			
Investments ....credited with:			
	Cash		$5,500
	Sundry		54,000

This latter handling of the facts would make A's books harmonize perfectly with the books of the bank, in so far as the loan transaction is concerned, and besides would have the advantage of applying the following principle:

The outgo of a positive value (investments) has been counterbalanced by:

1. The income of a positive value (cash)
2. The outgo (liquidation) of two negative values:
   a. Loan principal
   b. Loan interest
3. A loss sustained through the sale of a ledger asset

The first set of entries makes it appear that the bank has paid A $57,000; that A has paid back to the bank $51,500; that because the bank has paid A only $57,000, A has suffered a loss of $2,500, since his property, which the bank held, was worth $59,500. What makes matters worse, is that A's ledger, being posted from his cash book, shows that loans payable and interest accrued on loans were repaid in cash. If we had taken an abstract of A's ledger for audit purposes, and we were attempting to find documentary evidence of the individual transactions supporting the totals shown by the abstract, we would look

in vain for evidences of the above disbursements. Nor could we find anywhere in the statements furnished by the bank a credit to A of $57,000. Reverting to the ledger account with cash, we would find that while the initial and closing balances are correct, the intervening facts on both sides are misleading in so far as they do not reflect what took place.

In view of the foregoing, it may be said that the theory of the cash account demands that it shall be made to reflect actual, not theoretical, receipts and disbursements, and a balance resulting from actual positive and negative facts, which can be readily proved and supported. To make this possible, the cash journal must be used strictly as the scales in which the cash transactions are to be weighed as they occur, and not as they might occur.

The Cash Account and the Cash Balance

One of the disadvantages of the cash account as it is usually kept, no matter whether or not the foregoing principles are applied, is that under the generally established method of crediting cash when a check is drawn instead of when it is paid by the bank, the ledger account with cash may not represent the actual amount of cash in bank. To some accountants this spells misrepresentation of the facts. They claim that a check being an order to the bank to pay cash, the financial status of the enterprise has not changed until the payee under the order has presented it to the bank, and has actually received payment. This, of course, means that since the check was issued to liquidate a liability, the liquidation has not taken place, and the liability exists until the check is paid. Going still further, they say that if on December 31 the books of A show that he has paid B $50, while the books of B say that A still owes him $50, one set of books does not state the truth at December 31.

We may, with all propriety, decline to allow a love for logic to lead us so far from the domain of actuality. Still we must, in all justice, present the favorite arguments of all schools. It has been said that a cash account which does not show the true balance held by the depositories to the credit of a concern is useless in checking the accuracy of the interest credited by a trust company, say, on daily balances.

A Correct Cash Account

This is not the place for a discussion of the merits of the foregoing claims, but it is the place for the presentation of a very interesting handling of the account with cash, which some railroads, and at least one of the largest life insurance companies, have adopted, either substantially as given in the following or with slight alterations. The method may, or may not, be the result of the belief of its originators in the accounting fallacy of the one which it replaces, but, strangely enough, it is not subject to any of the criticisms which have been made of its rival. Its proper operation requires, besides the keeping of the usual financial books:

1. That all expenses incurred and all payments to be made be entered in a voucher record (or a series of records assigned to typical classes of expenses).
2. The keeping of as many check registers as there are depositories.
3. A ledger account with audited vouchers unpaid.
4. A treasurer's memorandum book intended to show daily the available balance of cash subject to check.

It presupposes an arrangement whereby the depositories will agree to return daily the canceled checks. This

				...ce		20000 00
			60000 00			60000 00
July	1	Balance	30000 00			

Figure 27. Cash Account

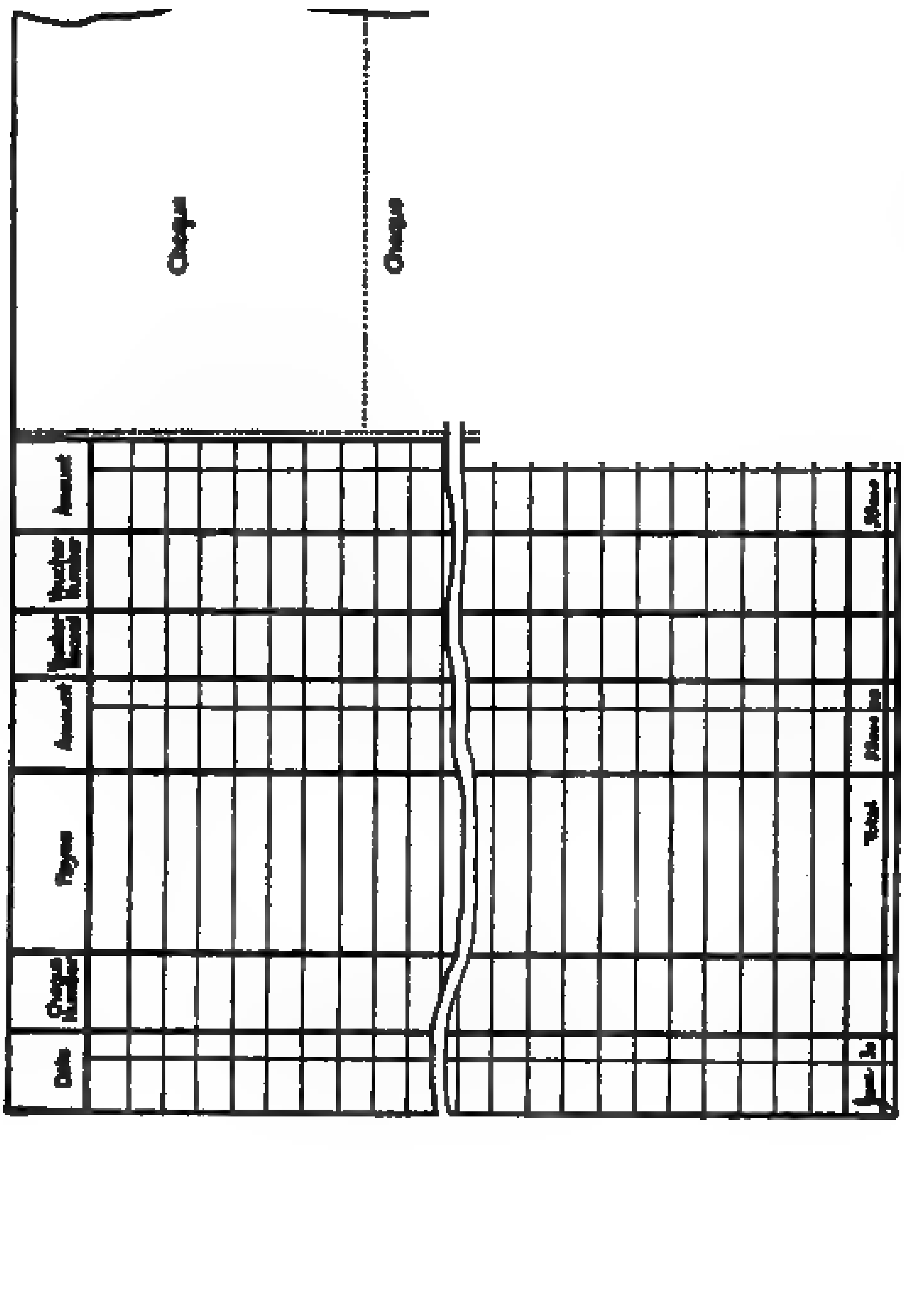


Figure 28. Check Register

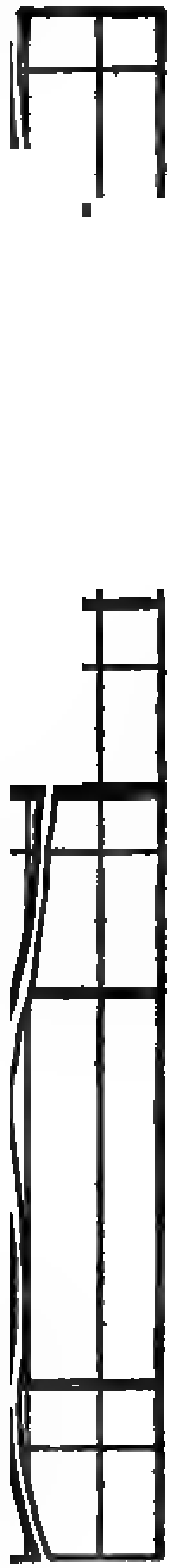


Figure 29. Treasurer's Memorandum

vital prerequisite of the method is sufficient to make it impracticable to the average concern.

As to its technique:

The checks drawn are recorded daily in the proper check register, and the amount drawn is recorded by the treasurer in his memorandum book of available cash. The check registers provide for the insertion of the numbers of the vouchers for which checks are drawn, as well as for any other information which may facilitate checking from book to book.

The amount of canceled checks returned by the banks is posted daily in the cash book to the credit of cash, and to the debit of audited vouchers unpaid. The returned checks are also recorded in the check register and in the voucher record.

At the end of a given month, the situation is as follows:

1. The ledger account "Cash" represents exactly the balance held by the banks to the credit of the concern.

2. The treasurer's memorandum book of available cash shows the amount of funds held by the banks, against which the concern can draw by check.

3. The cash book makes it possible to obtain the daily balances, and to compute the amount of interest which has been earned.

4. The ledger account "Audited Vouchers Unpaid" represents:

   a. The amount of vouchers for which no check has been drawn

   b. By reference to the check register, the amount of vouchers for which checks have been drawn but remain unpaid

5. The voucher record gives, no matter how required, the exact detail of the liability for audited vouchers unpaid.

6. The balance sheet shows:

   a. As the books stand, what is sometimes called the only true financial status of a concern.

   b. By the application of the following journal entry the financial status of the concern as it is customary to present it:

Audited Vouchers Unpaid..	$....	
To Cash		$....
The amount of vouchers for which checks have been issued, but are still unpaid by banks.		

Expressed in book totals and ledger accounts, the cash situation, say at June 30, 1914, irrespective of former balances, is shown by Figures 27-29.

Nature of Petty Cash

Petty cash may be:

1. A part of the cash receipts of a certain period, recorded in the cash book, but not deposited in the bank because it is to be used for small current disbursements. In this form, petty cash is part of general cash, and should figure in the cash book balance of the funds available at the end of the period. Disbursements made out of petty cash are temporarily withheld from the cash book, to be recorded periodically, or when they have reached a stated amount. Any petty cash book which may be used under this method of handling petty cash, is merely a memorandum which has no part in the scheme of the financial books of the concern. No entry of any kind is necessary to record the withholding of receipts for petty cash purposes.

2. An amount withdrawn from the bank, the withdrawal being recorded in a ledger account known as "Petty Cash," raised to reflect the outgo of small sums of cash disbursed currently for items of expense which are too small to be conveniently paid by check. In this form, the account is independent of the general cash account, and its balance does not figure in the cash book balance of available cash (unless sent back to it periodically). The petty cash book is also an independent journal which is used as a posting medium, precisely like its more important prototype, the general cash journal.

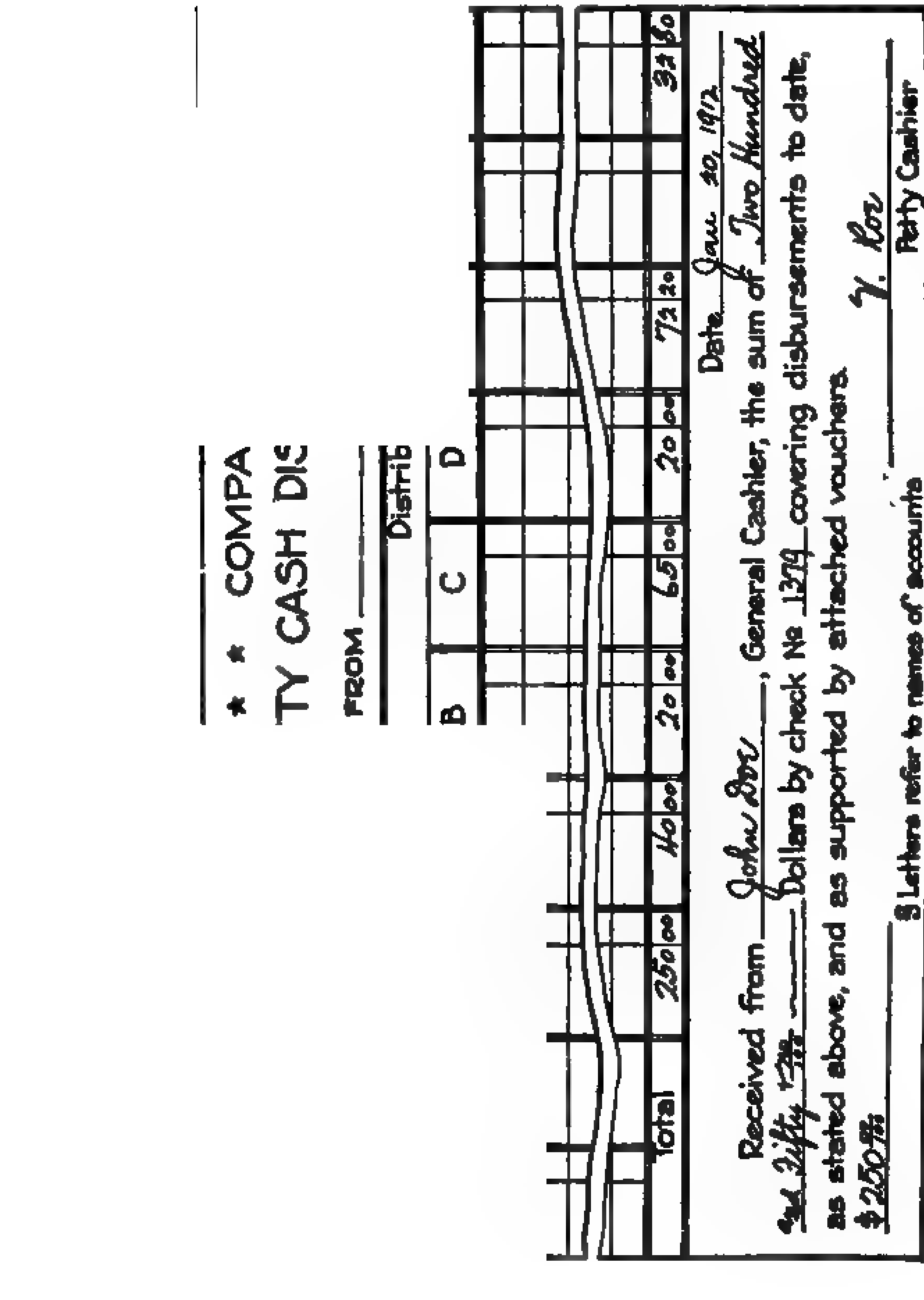
The expression in general journal form, of the cash book entry creating a petty cash account as described in class 2, is:

Petty Cash........................	\$....	
To Cash....................		\$....

The expression in general journal form, of the entry necessary to record the petty cash disbursements of the period in the proper general ledger accounts, is, say:

Telephone and telegrams..........	\$ 7.50	
Postage	5.00	
Office supplies....................	2.30	
General expense..................	17.20	
To Petty Cash.............		\$32.00
To record the petty cash transactions of the period.		

3. An amount withdrawn from the bank, and set up as a fund intrusted to a petty cashier whose duty it is to give change and to make all disbursements for petty expenses, and in settlement of invoices deemed too insignificant to be passed through the purchase journal. The fund is recorded in a special ledger account, bearing as a


* * COMPA

TY CASH DIS

FROM

Total			B	C	D			
	250.00	40.00	20.00	65.00	20.00	72.20		32.80

Date Jan 20, 1912

Received from John Doe, General Cashier, the sum of Two Hundred and Fifty 00/100 Dollars by check No 1379 covering disbursements to date, as stated above, and as supported by attached vouchers.

$250 00/100

Y. Roe

Petty Cashier

§ Letters refer to names of accounts

Figure 30. Statement of Petty Cash Disbursements

title "Petty Cash Fund," or "Petty Cash Fund—John Doe," or some other appropriate name.

The expression in general journal form, of the cash book entry creating this class of petty cash, is:

Petty Cash Fund—John Doe.......	\$....	
To Cash....................		\$....
To create an imprest fund, to be used by John Doe for petty cash disbursements.		

This method of treating petty cash differs from the one described under 2, in that it is supposed to show no fluctuations. Until returned to the general cashier it remains on the ledger at the same figure. In order to make this possible, all sums of money paid out by the petty cashier are returned to him periodically, or whenever the petty cash fund has been depleted to a stated figure.

Maintaining the Imprest Fund

When the petty cashier desires to replenish his fund he presents to the general cashier a statement setting forth his expenditures, supported by proper vouchers. The statement may be as shown in Figure 30.

The voucher may assume a much simpler form; the essential point is that the general cashier may readily obtain the data necessary to properly record in the cash book the expenditures made for him by the petty cashier. The check issued is either cashed by the petty cashier at the bank, or cashed by the general cashier himself. Whichever way it is done, the fund of the petty cashier is now restored to its original amount. The expression in general journal form of the entry made by the general cashier in the cash book is:

A*	$40.00	
B	20.00	
C	65.00	
D	20.00	
E	72.20	
G	32.80	
To Cash....................		$250.00
For disbursements made by the petty cashier.		

Theory of the Imprest Fund

It will be noticed that at the time the fund was created, the cash book entry merely recorded the setting aside of a portion of the asset "cash," for purposes of petty disbursements. Thus the cashier set apart from his general funds, a sum of money which he intrusted, as an "imprest" fund (money advanced, money loaned, money intrusted to a paymaster), to the petty cashier. This explains why the word "imprest" is used in qualifying the above mentioned method of handling petty cash. The system appears to have originated in the Imprest Office of the British Admiralty, in connection with the disbursements made by subaltern paymasters for the account of the general paymasters.

Special Duties of the Petty Cashier

In some concerns one of the duties of the petty cashier is to cash checks for the officers, the clients or the customers, and the employees. This brings about complications which necessitate the opening of a special bank account in the name of the petty cashier. He deposits daily to his credit the checks which he has cashed, and draws against the account whenever he requires funds. The handling of the fund is the same as indicated in the foregoing, but the memorandum petty cash book is arranged to show the exchange and bank transactions. (Figure 31.)

* Letters refer to ledger accounts.

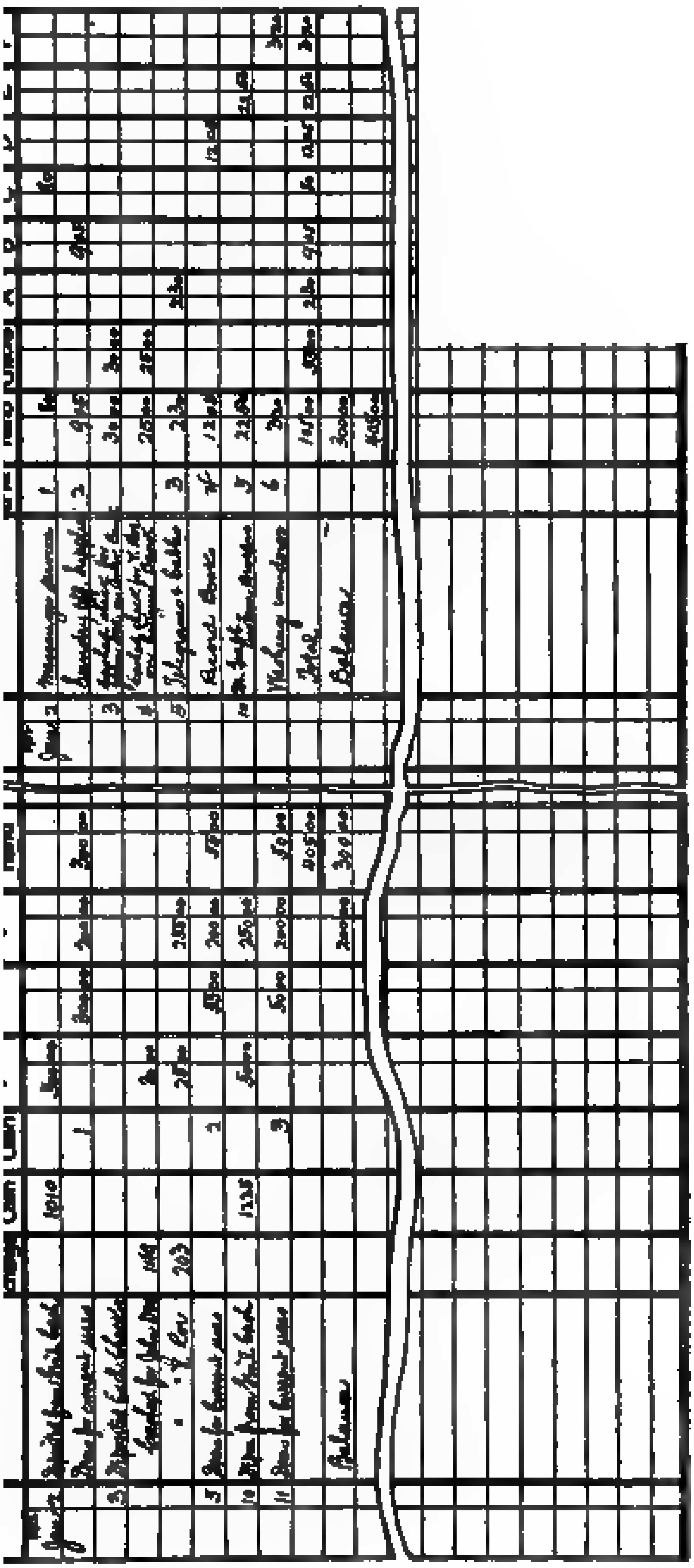


Figure 31. Petty Cash Book

CHAPTER XIV

ACCOUNTS WITH CUSTOMERS

Entries in Customers' Accounts

Cash may be affected by such a diversity of transactions, that it is not possible to state in advance the sources from which it will come or the channels through which it will go. Hence, it may be said of the cash account that it possesses no well-defined mechanism. In contradistinction, the customer's account presents a series of anatomical units with which we may become so thoroughly familiar as to be able to locate and assemble them readily, no matter how scattered they may be.

As soon as the word customers is mentioned, the mind of the accountant reverts naturally to the business transactions which affect their status on books of record. We think of charges to them for:

1. Sales on credit
2. Refunds when, having overpaid their accounts, they receive back that which was paid by them without being due

and of credits to them for:

1. Returned sales
2. Settlements by them in cash or its equivalent
3. Deductions from the amount receivable from them in the line of cash discounts, trade discounts, allowances for defective goods, damaged goods, old goods, shortages in shipments, freight paid by them and chargeable to the vendor, etc., etc.

Trade Discounts

The only one of the foregoing components of the customer's account which might confuse the student, is trade discounts.

Trade discounts are said to be "deductions from price lists allowed to the trade." They differ from cash discounts in that the taking advantage of the latter depends upon the financial status or prompt payment of the one to whom it is offered, whereas the amount of the former will positively not be included in the customer's remittance. A bill might include two kinds of discounts: one of, say, 10% to be deducted from the face of the bill, and another of, say, 2% to be similarly deducted provided remittance is made within ten days. It is clear that unless the debtor is in a position to pay within the allotted time, the only deduction which he can make from the bill is for the trade discount which, under all conditions, is no part of the contract of sale to which he has become a party.

If the policy of the concern is to charge all its customers with the list or catalogue price, there are two possible ways of relieving the accounts of the beneficiaries of trade discounts, of the excess charged to them over the amount which they are expected to pay:

1. Let the customers deduct the trade discounts from their remittances, and use the cash book as the journal through which they will receive credit for the amount not remitted.
2. Before the customers remit, clear their account by journal entry crediting them and debiting:
    (a) Trade Discounts
    (b) Merchandise, or Sales, or any other account which may have been originally inflated on the credit side by the amount of the trade discounts

It will be noticed from the above that the treatment indicated under "a" compels the raising of a general ledger account with trade discounts; whereas the second treatment, "b," eliminates the account entirely. This means that, in the first instance, there has been created a special nominal account measuring the extent of the deduction from the income to be received from sales, due to the desire of the administration to favor dealers in order that other expenses (such for instance, as advertising, or salesmen's salaries and commissions) may be correspondingly reduced; and that, in the second instance, the special nominal account has been avoided, in order that the already existing account with merchandise or with sales may show the net result of the sales as far as income is concerned.

If the policy of the concern is to charge all customers with the net amount collectable under the contract of sale, there can be no ledger account with trade discounts, and that component will be found neither in the account with customers, nor in the account with merchandise. Hence, whatever information might be required in regard to the extent of the reductions which have been made from the catalogue price, is lost in so far as the ledger is concerned, and must be sought elsewhere.

"Accounts Receivable"

Before leaving the subject of customers' accounts, it may be well to call to the attention of the student the fact that the term "Accounts Receivable," which is often applied to them, is to be condemned so far as the general ledger is concerned. The term as generally understood, refers to a balance sheet group, which is likely to embrace a multitude of accounts other than with customers. Since the balance sheet is a financial statement purporting to show the true financial condition of the concern at a given

date, it can afford to speak in concrete form, and to state broad classes of facts which, if not sufficiently illuminating by themselves, can be supported by explicit schedules. It is eminently proper for it to include in the group "Accounts Receivable," accounts current with customers, advances to agents, and claims against transportation companies which have been recognized as valid and are awaiting settlement, etc. But it is not proper for the ledger to speak vaguely; it must index the facts with at least as much care as the journal takes in weighing them, and it must adopt a terminology which will place each account in a position to state clearly what it contains.

CHAPTER XV

NOTES AND BILLS RECEIVABLE

Notes Receivable

F. A. Cleveland, in "Funds and Their Uses" says of promissory notes:

"A promissory note is a written contract for the future delivery of a specified sum of money * * * The delivery must be made on or before a stated time, and nothing will satisfy the contract except the delivery of the particular thing promised."

Treatment of Notes Receivable

Assuming that a promissory note has been given by a customer in settlement of his account, it would appear from the above definition that the execution of the instrument of credit has so altered the status of his account that the change must be recorded. He has indeed entered into a second contract quite different from the contract of sale under which he became liable for the goods sold to him on credit; he has substituted a written promise to pay a certain sum of money in a determinate future, for an oral or implied promise to pay a certain sum of money within a time more or less definite. While under the terms of the first contract, he could reduce his liability by making claims for allowances, or even by returning part of the goods sold to him, nothing will satisfy the second contract, except the delivery of the particular thing promised. Still, there are accountants who claim that since the consideration for the second contract is precisely the same as

the consideration for the first contract, nothing has happened, so far as accounting is concerned, on account of the execution of a promissory note, and no entry is necessary in the customer's account until the note has been met at maturity, or discounted.

Nevertheless, it appears to be the almost universal custom to credit customers with the amount of the promissory notes which they give in settlement of their accounts. This treatment of the matter is based upon the theory that an open account with a customer must be proved if contested, whereas the promissory note is *prima facie* evidence of value received; that the time at which settlement of an account current is demanded does not alter the liability of the debtor, whereas the maker of a promissory note is liable only if the instrument is presented for payment at the specified time, and surrendered; that when the payee under a note sues the party who gave it and dishonored it, he does not sue for payment of a customer's account, but for payment of the note.

The usual way of treating the general ledger account with notes receivable is to debit it with the face value of the notes received, the counter entry being a credit to the customers' controlling account,* and, if the occasion demands, to an account with interest for the excess which the note carries over the value of the account for which it settles; and to credit the account with the amount of the note when it is met at maturity, or as soon as it has been discounted at the bank, the counter entry being a debit to cash, in the first instance, and a debit to cash and to interest and discount in the second instance.

Treatment of Contingent Liability on Notes Discounted

The discounting of notes receivable raises the question of the liability of the one who has discounted it, to

* This, of course, necessitates a credit to the account of the customer in the subsidiary ledger.

the broker or bank which has purchased the paper. Leslie J. Tompkins says in regard to the liability of the parties to a note: "Every party to a negotiable instrument, whether he be the drawer or maker, acceptor or indorser, enters into a contract which, in some respects, differs from that entered into by each of the other parties named. This contract carries with it certain liabilities which he cannot evade." Since the customer's note has been transferred to the discounting bank by indorsement, it follows that the liability of the transferrer is contingent upon the dishonor of the note at maturity. The desire to express this contingent liability on the books of concerns which receive many promissory notes and discount them regularly, has brought about a handling of the account with notes receivable, which appears to give quite a twist to the principles of double entry.

We have said that an incoming value is counterbalanced by an outgoing value equal, inferior, or superior to it. Applying this principle to the discounting of a promissory note, we would say that there has come in a value (cash) inferior to the outgoing value (promissory note receivable) and that, as a consequence, there has come into the business a loss under the form of discount. Thus, equilibrium having been disturbed by the outgo of the note, has been reëstablished by the receipt of cash, and the recording of a loss equivalent to the excess of the outgo over the income. But under the theory that the contingent liability must be recorded, this is what takes place:

Notes Receivable remains unaffected in so far as the books are concerned; Cash is debited with the amount received, Interest and Discount is debited with the amount charged by the bank, and a liability account known as "Promissory Notes Discounted" is credited. As soon as information is obtained in regard to the payment of the

notes at maturity, the liability account is debited, and Notes Receivable is credited with the face value of the note which has been met.

If we were to submit this treatment to the rigid test of the principles of accounting, we would see that it does not express the transactions as they occurred. When the bank discounts a note, it does not purchase the vendor's contingent liability under the note; nor does it give its money in exchange for that liability. It purchases a commercially negotiable instrument which, at the time of sale, was recorded on the books of the vendor concern as an asset. In other words, it purchases an asset. Of course the bank buys the instrument subject to its being met by the maker at maturity, and if the instrument proves without value, the purchaser will call upon the vendor to make good the loss; but that liability of the vendor is problematic, whereas there is no question but that his asset "notes receivable" has been sold. This is precisely the reason why some accountants object to showing the liability for discounted notes on the balance sheet otherwise than as a footnote. Somewhere between the two methods, other accountants claim to have found the only true expression of the facts. They show the notes receivable at the full value of the instruments unmatured, whether held or discounted, and deduct therefrom on the asset side of the balance sheet, the contingent liability. Hence, the asset as extended represents the exact value of the notes held.

Dishonored Notes

In regard to the dishonor of promissory notes at maturity, the handling differs according as to whether they were discounted or held until due date. In the former case, the treatment differs also as to whether the recording of the discount was made in the account "Promissory

Notes," or in the "Contingent Liability" account. Dishonored notes which have previously been discounted and credited to the asset account, are treated as follows:

1. Credit Cash with the amount of the note and of the protest fee paid to the bank.
2. Debit the maker of the note with the face value of the dishonored instrument, as well as with the amount of the protest fee, or:

   Debit customers' controlling account with the face value of the note and the amount of the fee.

Dishonored notes which have been discounted, and credited at the time to the contingent liability account "Promissory Notes Discounted," require the following entries:

1. Credit Cash with the amount of the note and of the protest fee paid to the bank.
2. Debit "Promissory Notes Discounted" with the face value of the note, and the maker of the instrument with the protest fee.
3. Credit Notes Receivable with the face value of the note.
4. Debit the maker of the note with the face value of the dishonored instrument, or:

   Debit customers' controlling account with the face value of the note, and the amount of the fee.

Dishonored notes which have not been discounted, require the following entries:

1. Credit Notes Receivable with the face value of the note.
2. Credit Cash with the amount of the protest fee paid.

3. Debit the maker of the dishonored instrument with the face value of the note as well as with the amount of the fee, or:

   Debit customers' controlling account with both the amount of the instrument, and the amount of the fee.

The theory underlying the debit to the maker of the dishonored instrument, is to the effect that since the note so altered the status of the customer's account that it had to be closed, it cannot now be reopened.

The theory underlying the debit to the customer who gave the promissory note which is now dishonored, is to the effect that the consideration for the promissory note being the same as the consideration for the recording of the claim against the customer in the first instance, it is quite correct to reopen an account which was closed, upon the assumption that the instrument of credit would be met at maturity. This latter theory does not appear to have the courage of its convictions; if it is true that the nature of the customer's account was not sufficiently altered by the execution of the promissory notes to preclude its being reopened, then it seems that it should not have been closed at all.

Bills Receivable

The asset account "Notes Receivable" is frequently found, in practice, under the name of "Notes and Bills Receivable," and not infrequently under the generic name of "Bills Receivable." So far as accounting is concerned, the theory of these two classes of commercial instruments does not differ materially; still, there is good reason why it might be better to keep separate accounts with them.

"A bill of exchange," says Mr. Tompkins in his book, "The Law of Commercial Paper," is an unconditional order in writing addressed by one person to another,

signed by the person giving it, requiring the person to whom it is addressed to pay on demand, or at a fixed or determinable future time a sum certain in money to order or to bearer."

Thus a bill of exchange introduces into the relations between the proprietor of the business and his customer, a third person, the drawee, who, after the bill has been presented to him, becomes the acceptor, that is to say, the party liable to the payee. This alters the liability of the customer to the proprietor of the business; from primary it becomes secondary. No such alteration of liability is found in a promissory note.

Whether or not the keeping of separate accounts with notes and bills is deemed advisable by a concern whose custom it is to receive both classes of instruments, it seems that a concern which receives promissory notes only, should not permit the use of the term "bills receivable" on its ledger. The very name of the ledger account gives misleading information.

The opinion held upon this subject by W. M. Cole, of Harvard University, is quite different from the one expressed above—

"The account in which negotiable notes are recorded is called 'Bills Receivable.' Drafts which have been accepted by those upon whom they are drawn, are also recorded in Bills Receivable; but drafts which have not been accepted are not recorded at all on the principal books, for until accepted they have no value other than that of any written request. It should be noted that Bills Receivable has a restricted significance, and does not at all include ordinary so-called 'open accounts' or 'book accounts,' i. e., sums owed to a business by customers to whom it has sold goods on trust. The term 'Bills Receivable' is used only of promises to pay, written in the form of promissory notes or of accepted drafts."

CHAPTER XVI

ACCOUNTS WITH GOODS

Merchandise Account of Trading Concerns

The original purpose of this account was to gather the factors which affected the gross profits on merchandise.

It will be remembered that when speaking of the principles of double-entry bookkeeping,* it was said that incoming values greater than the outgoing values which they replaced, produced a gain which should be recorded in a nominal account. So far as merchandise is concerned, this could not be done conveniently, unless the cost of every object sold were known by the bookkeeper. If this were the case and he were able to furnish the physical effort which such bookkeeping would require, his entry would be, for every sale:

Customer (or Cash)................	$50.00	
To Merchandise...............		$35.00
" Profit on Merchandise......		15.00

It was found convenient to credit the goods account with the sale price of the goods sold, and, periodically, to apply to it the value of the inventory remaining on hand. Thus the skeleton of the merchandise account is merely this:

Debits	Credits
Initial inventory	Sales of the period
Purchases of the period	Closing inventory
Gross profit on sales	

* Page 70.

But since both goods purchased and goods sold are likely to prove unsatisfactory to the buyer, it follows that original debits made to the merchandise account are true only if none of the goods have been sent back to the vendor; and that original credits are true only if none of the goods have been returned by the customer. When goods sold are returned, the merchandise account is debited in order that the sale may be canceled; and when goods purchased are sent back, the merchandise account is credited in order that the purchase may be canceled. At this point, the structure of the account is as follows:

Debits	Credits
Initial inventory	Sales of the period
Purchases of the period	Returned purchases of the period
Returned sales of the period	Closing inventory
Gross profit on sales	

Inasmuch as the purpose of the merchandise account is to show the true gross profit on sales, it is evident that losses due to merchandise being destroyed as unfit to be sold, or to deterioration reducing its value, must be accounted for; and it is also plain that unless this is done before inventory time, by a credit to the goods and a debit to profit and loss, the profit shown by the merchandise account will not be the profit on sales, and the profit and loss account will fail to convey proper information in regard to extraordinary losses. Thus, the components of the merchandise account have become:

Debits	Credits
Initial inventory	Sales of the period
Purchases of the period	Returned purchases of the period
Returned sales of the period	Merchandise destroyed
Gross profit on sales	Closing inventory

It has been denied that the merchandise account should ever go further than this. On the other hand, it has been claimed that if thus restricted it cannot show:

1. On the debit side:
   a. The cost of freight and cartage incurred on the goods purchased.
   b. The cost of the freight and cartage on sales, which the vendor has agreed to pay in order that he might obtain for his goods the price recorded by the sales.
   c. The deductions which the vendor has agreed to make from the catalogue price, if his policy is to record all sales at that price.
   d. The freight and cartage paid by the vendor on goods returned to him by customers.
2. On the credit side:
   a. The proportion of the freight and cartage inward which applies to goods unsold.
   b. The freight and cartage paid on goods purchased which have been returned to the vendors.
   c. The trade discounts which would reduce the cost of the goods purchased, in case they have been recorded at catalogue price.

The above components, gathered according to their nature, show the structure of the merchandise account to be:

Debits	Credits
1. Initial inventory	1. Sales
2. Purchases of the period	2. Returned purchases
3. Freight and cartage inward on purchases	3. Freight and cartage inward, paid at time of purchase, on purchases now returned
4. Freight and cartage outward on sales	4. Trade discounts on purchases
5. Returned sales	5. Merchandise destroyed as unfit for sale
6. Freight and cartage inward on returned sales	6. Deterioration of merchandise
7. Trade discounts on sales	7. Freight and cartage inward on purchases, applicable to goods unsold
8. Gross profit on merchandise	8. Closing inventory

Analysis of the Merchandise Account

Prior to the division of the journal into its components (purchases, sales, purchases returned, sales returned, cash, etc.) the merchandise account, being posted daily, contained a multitude of unclassified facts which required extensive analysis in order to show how the gross profit was obtained. This is still the case whenever detail posting is in vogue. But when books of original entry are so constructed as to permit of the monthly gathering of posting material, the merchandise account becomes a perfect summary of trading transactions. As each class of facts is supported by details to be found in analytical journals, no analyses are necessary, and the material for financial statements is obtained by merely adding together the components of like nature as found in the accounts for the accounting period.

Subdivisions of the Merchandise Account

It has become the fashion to advocate the abandonment of the "old-fashioned merchandise account." A series of "simple" accounts, each one containing one of the components of the old account, will, it is claimed, give better results without analysis. It must be borne in mind, however, that after all the components of the merchandise account have been raised to the dignity of individual accounts, they represent nothing more than the monthly footings of columns of journals, and that in order to lead to a conclusion in regard to the result to which they all have contributed in a positive or in a negative way, they must be methodically gathered either in a trading account, or in the profit and loss account.

The accounts which are to be opened, to satisfy the requirements of this theory, are the very components expressed in the foregoing, in connection with the merchandise

account. Their accounting treatment at the end of the period is expressed by journal entries as follows:

Freight and Cartage Inward on Purchases Returned $......
To Freight and Cartage Inward on Purchases $......
To reduce the latter account to the amount of the uncanceled transaction.

Freight and Cartage Inward applicable to subsequent periods .... $......
To Freight and Cartage Inward on Purchases $......
To set up as a deferred debit item the portion of freight applicable to future sales.

Returned Purchases of Trading Merchandise........ $......
To Purchases of Trading Merchandise....... $......
To reduce the latter account to the amount of the uncanceled transactions.

Inventory of Trading Merchandise................. $......
To Purchases of Trading Merchandise....... $......
For portion of purchases of the period, not sold, and still held as an asset.

Trade Discounts on Purchases of Trading Merchandise .... $......
To Purchases of Trading Merchandise ..... $......
To deduct from cost of purchases the price list deduction to which we are entitled.

Profit and Loss.................................. $......
To Purchases of Trading Merchandise...... $......
" Freight and Cartage Inward on Purchases. ......
To close in the summary account the purchase cost of the goods sold, and the additional cost of handling.

Sales of Trading Merchandise..................... $......
To Returned Sales of Trading Merchandise.. $......
To reduce the former account to the amount of the uncanceled transactions.

Sales of Trading Merchandise..................... $......
To Trade Discounts on Sales................ $......
To deduct from the income from sales the price list deduction to which our jobbers are entitled.

Sales of Trading Merchandise.................... $......
To Profit and Loss........................ $......
To close in the summary account the gross income obtained from sales.

Profit and Loss....................................	$......	
To Freight and Cartage Outward on Sales of Trading Merchandise.....................		$......
For cost of forwarding to f. o. b. points, according to agreement with customers.		

Profit and Loss....................................	$......	
To Trading Merchandise Unfit for Sale......		$......
" Deteriorated Trading Merchandise........		......
For loss of capital having no relation with purchases and sales, but connected with trading merchandise.		

As a result of the above entries, the Profit and Loss account will exhibit the following skeleton:

PROFIT AND LOSS

1. Cost of Purchase of Merchandise Sold:		Sales of Trading Merchandise	$......
a. Cost of Purchases Sold	$......		
b. Cost of Handling, Inward	......		
2. Freight and Cartage Outward on Sales...	......		
3. Merchandise Unfit for Sale	......		
4. Deteriorated Trading Merchandise	......		

The gross profit on merchandise results from the deduction of the above debits 1 and 2, from the only credit contained in the account.

It is pointed out that whether the gathering of merchandise components is done monthly in the merchandise account, or only at the end of a period, in the Profit and Loss account, makes no difference whatever. Since one of the main objects of accounting is so to gather financial facts that it will be possible readily to obtain financial statements, it must be admitted that complex accounts posted from analytical books of original entry are equally as satisfactory as simple accounts which are supposed to render the ledger analytical.

Inventory of Trading Merchandise

The inventory of a trading concern should be valued at cost. It has been held that it is proper to compute it on the basis of the market value, if such a value is smaller than cost; but it is generally denied that a market value higher than cost can be used. If the lower value is allowed, there is no reason why the higher one should not be. There is, however, a good reason why market values should not be used at all. Accounting is not interested in what would have happened "if," but in what has actually happened; and since the goods unsold were purchased at a certain price, the profits realized are to be measured by comparing that price with the proceeds. To reduce the inventory to a value lower than cost, is to add to the cost of the goods sold during the period; and to raise the inventory to a value greater than cost, is to reduce the cost of the goods during the period. In either case, the result is contrary to the truth.

The taking of a physical inventory at the end of every accounting period is customary with all trading concerns selling goods which are subject to shrinkage, to deterioration by exposure, to thefts, or to errors in weighing at time of purchase and of sale. When, however, these conditions are not present, it is not unusual to find that a book inventory is considered quite satisfactory. In such cases, the purchases of merchandise are entered by classes of goods, in a "merchandise stock book" showing, on the debit side, the quantities purchased, their cost per unit, and their money value; in the credit column, the quantities sold, their cost per unit, and the money value of the sales, an average being established if the occasion arises; in the balance column, the quantities remaining, their cost per unit, and their money value, and, if prices are subject to fluctuations, or have fluctuated, the average cost and money value. (See Figure 32.)

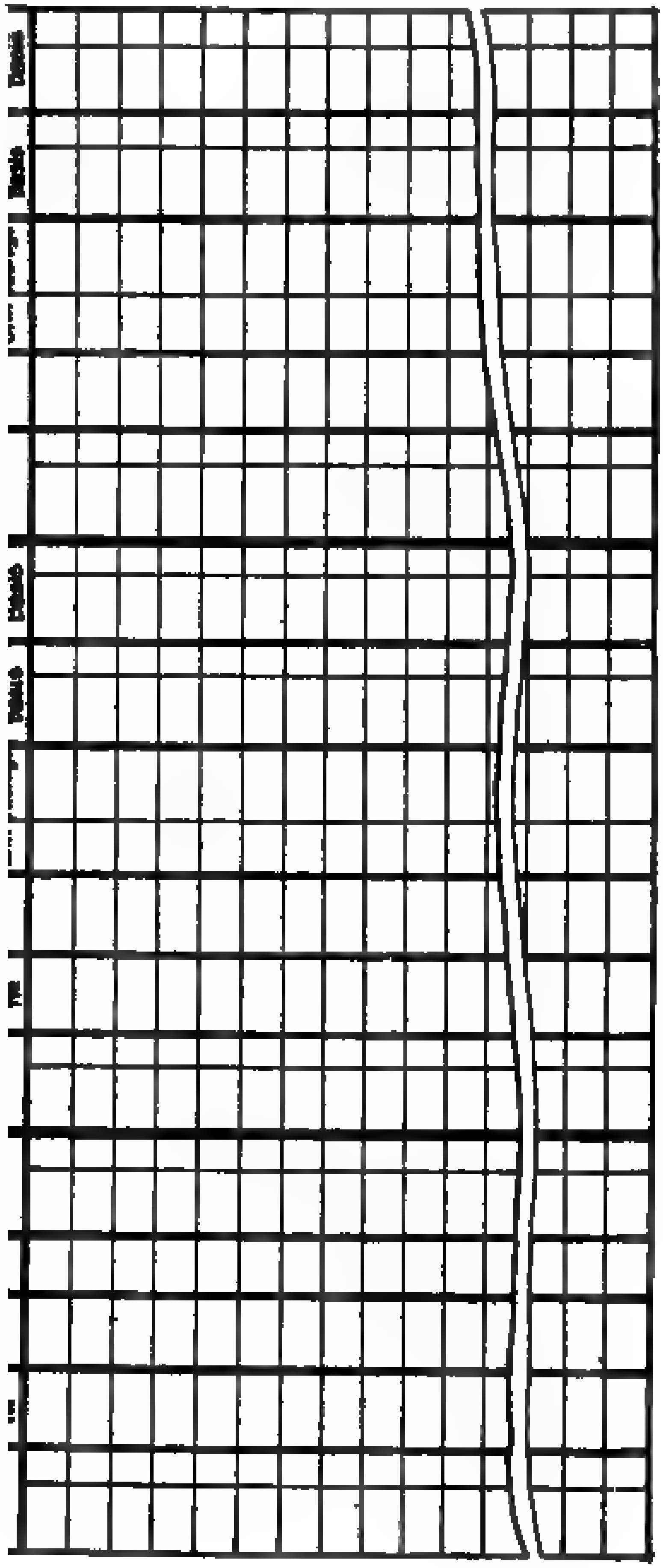


Figure 32. Merchandise Stock Ledger

Merchandise Accounts of Manufacturing Concerns

Traders sell their goods in the shape in which they purchase them; manufacturers sell "finished goods" which have undergone a "manufacturing process" in the course of which labor has been expended, materials and supplies consumed, and expenses incurred. Thus, so far as the goods are concerned, there are three distinct stages:

1. The stage when they are in their raw state
2. The stage when they are "in process" (or in "progress")
3. The stage when they are "finished"

As they pass from stage to stage, the goods accumulate cost, until, upon completion, they stand precisely in the same relation to the manufacturer as trading goods do to the trader. Thus, it may be said that the "Finished Goods" account is the "Merchandise" account of the manufacturer, built up from its sundry components:

Debits	Credits
Initial inventory	Sales
Cost of goods finished during the period	Closing inventory
Returned sales	
Gross profit on sales	

As to the elements of cost which the goods manufactured accumulate while passing from stage to stage, they may be briefly stated as follows:

1. Raw Material Stage (Ledger Account: "Raw Materials"):

a. The cost of purchase of materials and supplies
b. The cost of freight and cartage inward thereon
c. The cost of handling and storing them

The last two items have sometimes been referred to as "Pre-Process Cost."

2. *Goods in Process Stage (Ledger Account: "Goods in Process"):*

   a. Cost of raw materials transferred from stores

   b. Productive labor, that is to say, the skilled labor which produces the finished goods, and can be allocated:

      (1) To the product at large if only one class of goods is manufactured

      (2) To individual units of production if several classes of goods are manufactured

      (3) To job numbers in either case

   This labor is consumed for the production of the manufactured goods only, and has nothing to do with the other phases of the activities of the factory.

   c. Manufacturing burden (also called manufacturing overhead), that is to say, the expenses incurred in connection with the operations of the factory, which, while part of the cost of manufacture, cannot be allocated to any given unit of the production, and must be apportioned thereto on some scientific basis. It includes:

      (1) Unproductive labor:

         (a) Superintendence and supervision, including the salaries of the superintendent, and of his assistants, and the wages of the foremen.

         (b) All the unskilled labor which, while not directly expended on the manufactured product, is necessary and beneficial thereto, or is required in order that the factory may continue as an organized body.

(2) Factory expenses, such as fuel, light, power, rent, sundry supplies, repairs to machinery and tools, tools consumed as a result of operations, and, if operating reserves are considered better than surplus appropriations, the estimated depreciation of machinery and tools.

d. General factory burden (also called general factory overhead). When the organization of the factory is such that it is run as a distinct department, any expense which is called for by that very organization, such, for instance, as the keeping of factory records, the cost of stationery and printing, the estimated depreciation of the factory buildings and factory building equipment, etc., must be apportioned to the cost of the goods in process.

3. Finished Goods Stage (Ledger Account: "Finished Goods"):

a. When goods have passed through the "process" stage, and are ready for sale, their cost is credited to the account "Goods in Process," and debited to the account "Finished Goods." At this point, we really have a manufactured merchandise account, which differs from the trading merchandise account, only in that the latter shows every unit of its mechanism, while the Finished Goods account receives from an intermediary, a unit composed of:

(1) Purchase cost of goods ready to be sold, including the following components of the merchandise account:

(a) Initial inventory of goods purchased
(b) Purchases of the period

(c) Freight and additional cost of goods purchased

Less:

(d) Closing inventory of goods purchased, inflated by additional cost applicable thereto

(2) Manufacturing cost of goods purchased and made ready to be sold

The components of the Finished Goods account are:

Debits	Credits
Initial inventory of goods finished and unsold during the prior period	Sales
Cost of goods manufactured during the present period	Closing inventory
Returned sales	
Allowances on sales	
Trade discounts	
Gross manufacturing profit	

If the system of bookkeeping which has been adopted, provides for separate accounts for sales and for the transactions incident thereto, the Finished Goods account is reduced to the functions of a species of Inventory account, of which the following are the components:

Debits	Credits
Initial inventory	Closing inventory
Cost of goods manufactured during the period	Cost of manufactured goods sold (debited to profit and loss or to a group account "Cost of Goods Sold," which is, in turn, closed into the Profit and Loss account)

Inventories of the Merchandise Accounts of Manufacturing Concerns

At the close of the accounting period, the valuation of inventories of raw materials, sundry supplies, goods in

process, and finished goods, presents serious difficulties, unless the cost system of the concern is sufficiently developed to give positive and ready data concerning the manufacturing process.

Inventory of Raw Materials and Sundry Supplies

If, in connection with the raw materials and the sundry supplies, there is kept a stock ledger (Figure 33), a book inventory may be obtained which will check the accuracy of the physical inventory, or which may even be allowed to take its place. The stock ledger is so arranged that it contains an account with each class of merchandise. Individual accounts are debited with the quantity, the cost per unit, and the total money value of the initial inventory (if any) and of the purchases of the period; and credited with the quantity, cost per unit, and money value of the material which goes out upon requisitions. Information is supplied also as to the destination of the outgoing material. The difference between the debits and credits gives the quantity and money value of the goods remaining in store; it also gives the cost per unit if the units have been acquired at a uniform figure. In the contrary case, the average cost price must be obtained as well for the amount of the goods remaining on hand as for the value of the goods requisitioned for factory or other purposes. If no stock ledger is kept, a physical inventory is essential, the pricing of which will have to be established by reference to the purchase invoices of the period. The process will be not only lengthy, but inaccurate, unless a great deal of care is exercised.

It will be noticed that the example submitted affords useful information to the purchasing agent, in that it indicates the exact quantity of material ordered which has not as yet been received at inventory time, or at any other time. It also gives, under the heading "General Order

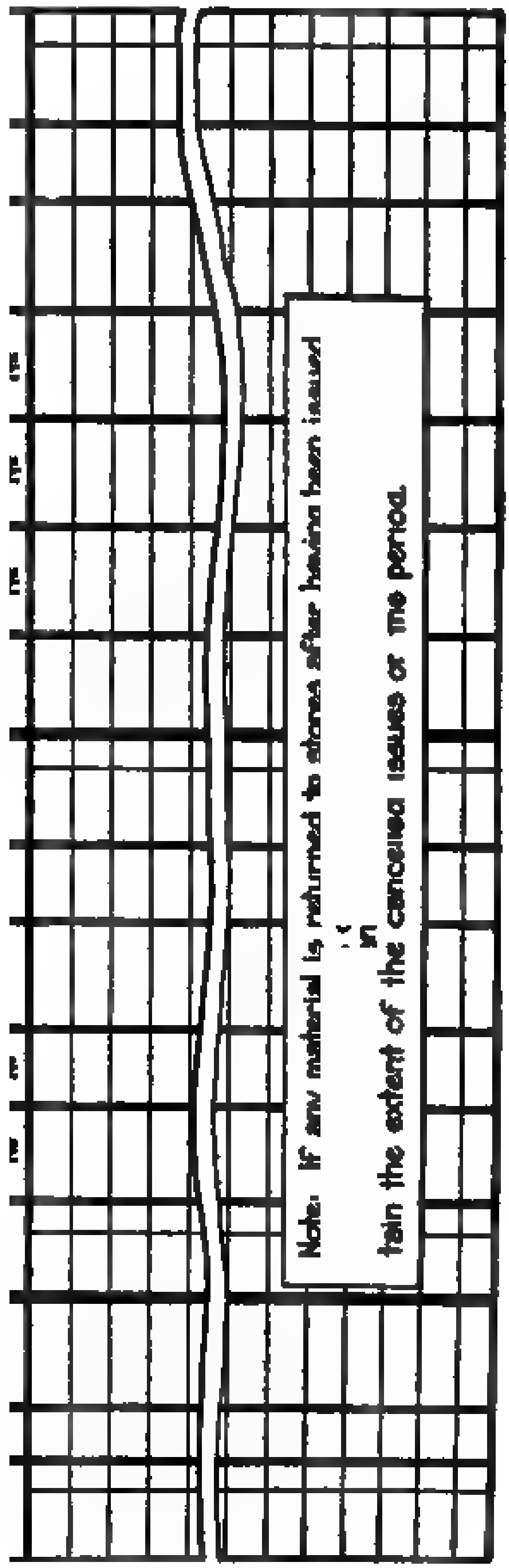


Figure 33. Stock Ledger

No.": the quantity and the amount of material which has been consumed for purposes other than for manufacture, such as repairs and maintenance, additions to plant, etc.

Inventory of Goods in Process

If the concern has an adequate system of cost accounting, the recapitulation of the cost sheets (Figure 34) established for job numbers or for stock numbers (or for both) still in progress, will give the inventory value of the asset "goods in process," provided it is customary to apply the overhead burden of a period to the processes of that period. If the custom is to apply the burden to finished goods only, either the pricing of the inventory of "goods in process" will have to take into consideration, subject to a subsequent reversal of the entry, the proportion of the burden applicable to the goods when completed; or there will have to be created a special account which will contain the said burden, in order that it may be withheld from the cost of operations, and shown in the balance sheet as a deferred debit to cost of goods undergoing process of manufacture.

With minor alterations in the descriptive and statistical part thereof, Figure 34 can be used for factories which operate on job numbers.

Inventory of Finished Goods

Under a proper cost finding and cost recording system, the valuation of the inventory of finished goods is established precisely like that of goods in process, by recapitulating the cost sheets relating to the job (or stock) numbers which have not been sold during the period.

Inventory When There Is No Cost System

If there is no cost system, the valuation of the inventories of goods in process and of finished goods will have

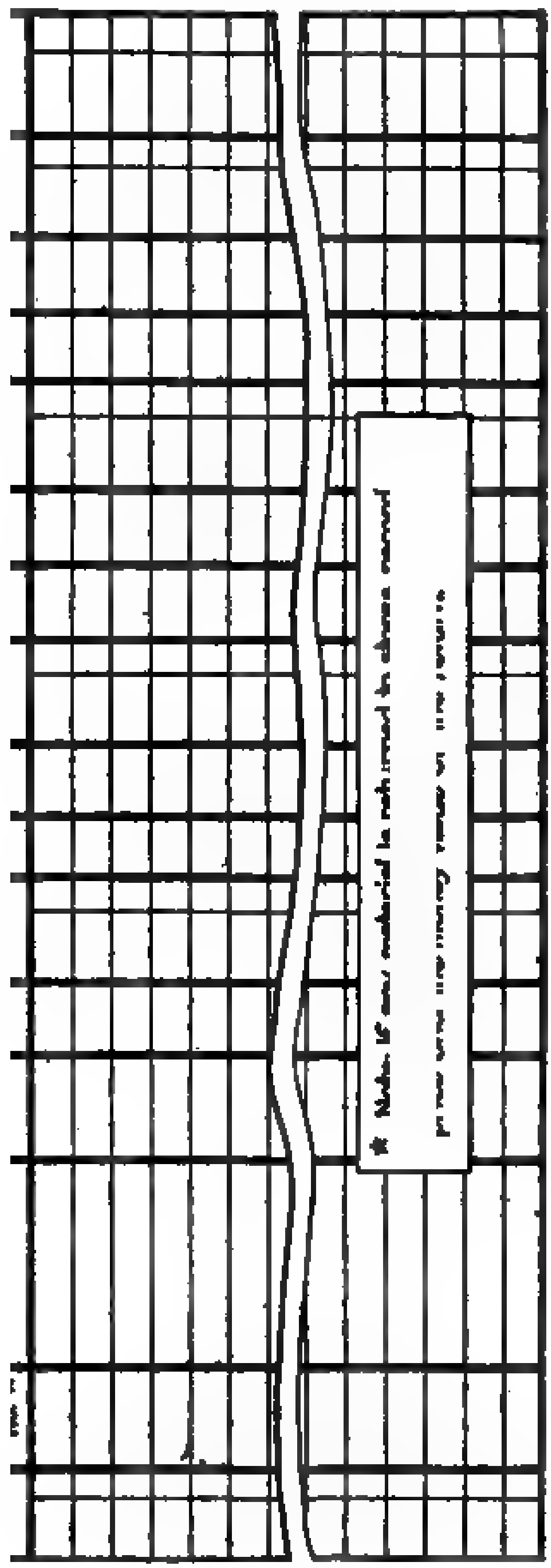


Figure 34. Cost Sheet

to be established by what might be called the "dead-reckoning" method. A satisfactory basis will have to be found for the application of labor and overhead expenses to the material represented by the two classes of goods. Under these conditions, it is evident that no accountant is in a position to pass upon the accuracy of the figures submitted. His task, however, instead of being lightened by this exemption from responsibility, will be materially increased owing to the difficult character of the periodical adjustments to be made in order that the general books may support the financial statements which he will submit.

The inventory of raw materials and sundry supplies, when applied to the net debit of the general ledger account therefor, will give the consumption of materials and supplies during the period, either for manufacturing purposes, or for the general purposes of the plant. The dividing line between these two classes of facts will be given by an analysis of all the available factory records and memoranda which may throw any light whatever on the subject. The amount used for manufacturing purposes will be transferred to the debit of a ledger account "Goods in Process" raised for the purpose of obtaining the cost of the goods put in progress during the period, while the amount used for the plant will be debited to the different accounts with subdivisions of the plant, or to Repairs and Maintenance account. To the account "Goods in Process" will be debited separately:

1. The productive labor
2. The factory manufacturing overhead
3. The factory general overhead

applicable thereto, as ascertained from analyses of the pay-roll and other records, and from the classification of the nominal factors disclosed by the general books or by

analyses thereof, and as distinguished from the proportion of these items which is to be charged to capital accounts or to repairs and maintenance accounts. At this point, the account "Goods in Process" will contain the total cost of the manufacturing activities of the factory for the whole period.

It will now be necessary to credit the account, and to debit Finished Goods, with the difference between the total value of the individual items 1, 2, and 3, and material, and the amount thereof said to be applicable to the goods unfinished and still on hand at the end of the period.

The balance remaining in the account "Goods in Process," will be the inventorial value of that asset.

The last step will be to credit the Finished Goods account with the value of an inventory which will be established by adding to raw material value of goods on hand, a proper proportion of productive labor, and a proper proportion of the two classes of factory burden. The balance of the account will be transferred direct to Profit and Loss, or to an intermediate account "Cost of Goods Manufactured and Sold," which will in turn be transferred to the Profit and Loss account and opposed to the sales in order that the gross profit may be known.

Apportionment of Overhead Expenses

The application of overhead expense, at inventory time, to quantities remaining in process, reveals the importance of the subject of distribution, and raises, naturally, the question of the basis for such distribution.

1. Labor Rates

It is claimed by some accountants that a satisfactory basis is found in the division of the total of each class of overhead (or of the two classes together), by the total amount of productive labor consumed during the period.

This, they say, gives the rate to be used in the distribution of overhead, to jobs, to orders, or to general classes of goods manufactured. Others maintain that this basis will be moderately accurate, only if the operators relate to a single class of product, and if the quantity produced is practically the same from month to month. They suggest that a more accurate application of the burden could be made on the basis of the ratio which the annual total burden bears to the annual total hours of direct labor consumed by each class of goods, or each job number or order number.

2. Machine Rates

There are still others who claim that while productive labor has been, up to modern times, the essential and probably the basic factor of cost, it has so far ceased to be so in these days of machinery as to practically eliminate the element of human skill from the work performed by the so-called "productive laborers." They suggest the "machine rate" as the only satisfactory basis on which to apply overhead expenses. This means that the burden is to be distributed on the basis of the ratio that it bears to the total number of hours of work produced by the operating machines.

Going still further, some claim that neither basis will be effective if applied to the manufacturing as a whole, but that both may work well when applied to each and every department of the factory subdivided into as many departments as there are phases of the process.

To continue the nomenclature of distribution bases we may mention the "material" rate, the "labor and material" rate, and the "old machine" rate, the "new machine" rate, and the "pay" rate.

The "new machine" rate is especially interesting because it attempts to accumulate upon the machines which

produce the goods in a particular department, the total cost of operations of that department, including all labor; and thus, it is possible to obtain the hour cost of operating a machine. The manufacturing cost of the goods produced in a department is then found by multiplying the machine hours required for the production of the goods, by the cost of the machine hour.

The Problem of Expense Distribution

Whatever may be the views of accountants upon the matter of expense distribution, "production and efficiency" engineers scorn them. Hamilton Church says in his book on "Production Factors in Cost Accounting and Works Management":

"The error which dominates and vitiates all the usual and popular methods of dealing with indirect expense is simply 'analysis.' This is the rock on which they all founder. For the purposes of the accountant this analysis is sufficient, because the accountant is concerned neither with the efficiency nor with the improvement of production.

"It does not matter greatly to him whether a particular item of expense is due to inefficient power distribution, or to worn-out machinery, or to buildings imperfectly adapted to their uses. To him an expense is an expense; but to the production engineer it may be more than an expense—it may be a revelation. Yet, as long as we persist in looking on all the activity and all the expenditure going on in and about a works as due to production, so long will the accountant's point of view necessarily hold the field. As long as we shut our eyes to the fact that actual production is the last organization in a chain of separate organizations, so long will the present confused ideas about indirect expenses or establishment charges hold their ground unshaken."

It is not the intention to enter into a discussion of

cost accounting, or, as it has been termed of late "cost finding." This branch of accounting is far too extensive to permit of its being even sketched in the present volume. Be it sufficient to state that articles are published almost daily on the application of factory overhead, and that the subject deserves the special attention of the student who has mastered the principles of accounting.

CHAPTER XVII

CONSIGNMENTS—SHIPMENTS INWARD

Relations of Consignor and Consignee

While the subject of consignments, from the point of view of modern business practice, is far less important to-day than it was fifty or sixty years ago, it has lost none of its importance from the viewpoint of the accountant, since it gives rise to the difficult problems of agency accounting.

So far as the consignee is concerned, he may be:

1. A "factor," otherwise known as a "commission merchant," whose business consists in selling merchandise belonging to others in consideration of a "factorage" or "commission" agreed upon.
2. An individual or concern engaged in any line of business, whose facilities for selling in a desirable market make it profitable to engage him or it occasionally to act as a factor in return for proper compensation.

Consignments made to either class of consignees establish, between the parties, the relation of principal and agent. There is, however, this difference: certain states of the Union license regular factors and bond them, whereas no state requires either bond or license from an occasional consignee.

Consignee's Duties and Liabilities

The factor (or commission merchant) and the occasional consignee (or correspondent) owe the principal for whom they act as agents, such ordinary care of consigned goods as a prudent person would take of property intrusted to him. They are not liable for losses due to causes over which they could not, in reason, be expected to have control; but they are liable for all losses due to their failure to carry out instructions which they have received from their principals.*

Factors may act under specific or under general instructions. In the first instance, they must sell at the price fixed by the consignor; in the second instance, they must sell at the highest price obtainable, and exert due diligence to that end. The term "due diligence" is not understood to include foresight in connection with sudden fluctuations of prices. If the agreement entered into is to the effect that the goods will be sold at no less than a certain price, a sale by the consignee at less than the said price is in the nature of a violation of specific instructions, and makes him liable for the difference.

In the absence of specific instructions to the contrary, a factor may sell on credit; if he does so, and exercises proper diligence in ascertaining the financial responsibility of purchasers, he is not liable for losses due to their subsequent failure. What is still more important to the accountant, the factor is not liable to his principal for the money value of sales until he has collected the amount due thereunder. This rule, however, does not apply where the factor has lacked prudence in giving credit; or where he has been negligent in attending to collections; and, lastly, where he operates under the provision of a "*del credere*" agreement, that is to say, when he has agreed, in

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* Scott *v.* Rogers, 31 N. Y. 676, holds that a consignee who had received instructions to sell goods on a certain day at a specific price, or to ship them to a certain place, and had done neither, was guilty of a "conversion" of the goods.

consideration of a higher commission, to hold himself responsible for the proceeds of all sales made by him as agent.

If the consignee is under specific instructions to sell for cash, or on credit upon the pledge of security, he is liable for all losses due to his failure to comply.

A consignee may incur, for the account of his principal, such expenses as are necessary for the protection of the merchandise consigned to him, and such losses or allowances as are necessary to the validity of his sales. His doing either or both, creates in his favor a lien on the goods, similar to the one which he obtains by making advances to his principal. The lien for expenses extends to customs duties, marine and fire insurance, freight and cartage, storage, weighing, handling, packing, unpacking, etc. The lien for losses extends to allowances for defective goods, shortages in weight, faulty packing, etc.

The question of advances by the consignee to the consignor is all the more important, because some legal authorities hold that advances give the factor the right to sell enough of the consigned goods to satisfy his claim. Even when selling for advances, however, some of the authorities hold that he is bound to obey his instructions regarding the price at which the goods should be sold.

The consignee has no right to pledge as his own, goods received by him on consignment. But if he has made advances to his principals, he may, in order to secure his own debts, deposit an amount of goods equivalent to his advances, provided he gives the third party due notice that the goods are merely liened to him, and not owned by him.*

Unless the instructions received by the factor expressly forbid him to do so, he may accept promissory

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* Urquhart v. McIver, 4 Johns (N. Y.) 103; Silverman v. Bush, 16 Ill. App 437.

notes in settlement of consigned goods sold; if he has duly ascertained the standing of the maker of the note at the time of its execution, and has not discounted the note for his own use, he is not liable for the dishonor of the instrument, due to a subsequent failure of the maker.

The acceptance of consignments by a factor, makes it imperative for him to comply with such disposition of the proceeds as his principals may wish to make. If money is due his principals he cannot refuse to accept a draft drawn by them to the order of a third party, provided he has notice of the draft.

Unless specific provisions to that effect exist in the agreement between the principal and the factor, or unless such a provision can be implied, either from the contract or from custom, the factor is not chargeable with interest except when he fails to render account at the proper time, and to remit when he should do so.

The Factor's Accounts and Accounting

Under this general heading, the Cyclopædia of Law and Procedure says of factors:*

"The factor must account to his principals for goods sold * * * he must, when reasonably requested, present to his principal a full, complete, and specific account of his dealings between themselves, and between the factor and the purchasers. It is held that it is the factor's duty to be prompt in rendering an account of his sales, whether requested to do so or not, and that a failure to render an account for an unreasonable time will render him liable, especially where a demand is impracticable or highly inconvenient. That he may render a satisfactory account, it is his duty to keep books in which are entered correct accounts of his transactions, and the books should be subject to the principal's inspection, and the principal is

* Cyc., Vol. XIX, p. 135.

entitled to a correct copy of the entries in the books, including all memoranda connected therewith. Accounts current are necessarily provisional until settled, and even after settlement may be rectified for errors and omissions, subject to which every settlement is made; but if the factor render his account in good faith, and the principal makes no objection to it, the principal's assent to it as correct is presumed; and unless objection is made within reasonable time his principal will be bound by the accounting rendered."

Francis B. Tiffany, in his "Handbook of the Law of Principal and Agent," says of the agent's duty to account:

"It is the duty of the agent to account to the principal for all the money and property coming into his hands by virtue of his employment, including all profits resulting from the transactions, either as agent, or on his own account in breach of his duty as agent.

"His specific duties in this respect are:

1. To keep accounts of all his transactions in the course of the agency, and to render his accounts whenever required by the terms of his employment, or upon demand.
2. To keep money and property of the principal separate from his own, and from those of third persons.
3. To pay or deliver to the principal all money and property of the principal coming into his hands as agent, whether required by the terms of the employment, or upon demand."

Books of the Factor

The foregoing remarks concerning the rights, duties, and privileges of the factor, commission merchant, or con-

signee, appear to leave him no choice but to make his accounting comply with the spirit of the statutes. As to the accounting method which he will adopt, he may choose between two distinct treatments:

1. He may record in his own general books all the transactions affecting consignments, in such a manner as to keep what he owns and what he owes as a business man separate from that which he holds as factor, and for which he is accountable to his principals.
2. He may record in special agency books, all the transactions affecting consignments, and periodically transfer to his own books the results of his activities as factor, in so far as they have affected his assets, his liabilities, and his income.

Books of the Factor—Agency Accounts Kept in General Books

Since one of the accounting duties of the factor is to keep the money and the property of his principal separate from his own, and from those of third persons, it follows that, if he keeps only one set of books, he must:

1. Open a separate account with each consignment and with each consignor.
2. Keep a separate bank account for each individual consignor, and one for himself.
3. Record separately purchases and sales of, and profits on, merchandise traded in by him on his own account.
4. Separate the accounts of his own customers from those of the customers of his principals, and keep separate controlling accounts with the customers of each consignor.

5. So plan his books of account, that they will differentiate:

   a. The factor's own assets, and the assets of his individual principals, the latter including:

      (1) The goods held on consignment, recorded at their consigned value.

      (2) The cash deposited in his name, but as agent for his individual principals, and, if conditions warrant, the unsettled consignments, customers' balances, and unmatured promissory notes receivable.

   b. The factor's own liabilities, and the credit accounts necessary to counterbalance the principals' assets held by him; these credit accounts, which are merely contras of the principals' unrealized assets, or represent maturing liabilities to the extent of the realized assets, comprise:

      (1) The contra of the consigned goods account, that is to say, the consignor's individual goods account.

      (2) The consignor's individual account current containing the proceeds of the sales, less the charges made by the factor for advances or expenses, or both and for commissions.

Thus, a theoretical trial balance, before the closing of the general ledger of the factor whose books have been kept according to the above described method, might be:

Trial Balance

Of the books of John Harrison, Commission Merchant

(Before Closing)

Furniture and Fixtures —J. Harrison	$ 3,000.00	Creditors—J. Harrison	$ 1,561.50
General Cash—J. Harrison	1,650.00	Notes Payable—J. Harrison	750.00
Customers—J. Harrison	725.50	Sales—J. Harrison	7,000.00
Allowances to Customers —J. Harrison	25.00	Commissions—J. Harrison	551.40
Merchandise—J. Harrison	5,000.00	Capital—J. Harrison	3,499.00
General Expense — J. Harrison	300.00		
	$10,700.50		$13,361.90
Consignment No. 1	$ 4,000.00	Consignor No. 1—Goods Account	$ 4,000.00
" No. 2	3,500.00	Consignor No. 2—Goods Account	3,500.00
" No. 3	1,660.00	Consignor No. 3—Goods Account	1,660.00
Cash—J. H., Agent— Account No. 1	4,015.00	Consignor No. 1—Account Current.....(a)	1,613.50
" No. 2	340.00	Consignor No. 2—Account Current.....(b)	196.00
" No. 3	509.00	Consignor No. 3—Account Current.....(c)	1,043.10
Promissory Notes—Consignor No. 3	150.00		
Customers — Consignor No. 3	500.00		
	$14,674.00		$12,012.60
Total Debits	$25,374.50	Total Credits	$25,374.50

(a)	Charged with commissions of	$401.50, and with advances of	$2,000.00
(b)	" " " "	34.00, " " expenses "	110.00
(c)	" " " "	115.90	
		$551.40	$2,110.00

It will be noticed that the difference between the assets of his principals, held by John Harrison, and the credit accounts which he has created to offset them or to reflect his accountability therefor, is precisely the amount of the commission, advances, and expenses, charged by him to the individual account current of the consignor liable therefor. We shall shortly see what accounting steps the factor must take to close his books, and to adjust his own assets, as well as the assets of his principals: let us now express in concrete form the journal entries made by him so far as consignments are concerned, during the period which is about to close:

1. Debit: Individual consignment accounts Credit: Individual consignors' goods accounts	with the consigned value of the goods received.
2. Debit: Individual consignors' goods accounts Credit: Individual consignment accounts	with the consigned value of the goods sold.
3. Debit: Individual consignors' cash accounts (or promissory notes receivable, or consignment customers' controlling accounts) Credit: Individual consignors' accounts current	with the sale price of the goods sold.

4. Debit: Individual consignment accounts Credit: Individual consignors' goods accounts	with the consigned value of sales returned.
5. Debit: Individual consignors' accounts current Credit: Individual consignors' customers' controlling accounts	with the sale price of the goods sold, now returned.*
6. Debit: Individual consignors' accounts current Credit: a. Factor's cash account, or creditors' accounts or both b. Factor's commission account	with advances made to, and expenses paid and incurred for the account of the principal, and with the commission earned on the sale of his goods.
7. Debit: a. Individual consignors' cash accounts or promissory notes receivable b. Individual consignors' accounts current Credit: Individual consignors' customers' controlling accounts	a. with settlements made by customers. b. with allowances and rebates made by the factor in accordance with his instructions.

* In connection with the return of cash sales credit the individual consignor's cash account with the amount of the refund.

8. Debit: Individual consignors' accounts current	with the cash remittances made by the factor, or with
Credit: Individual consignors' cash accounts	the disposition of the cash proceeds as per instructions.

Passing now to the closing of the factor's books, let us assume:

1. That the inventory of his own merchandise shows a value of $1,500.
2. That the end of his accounting period corresponds with the time at which he must account to his principals, and remit the cash proceeds of the sales, there being in his agreement with them no specification as to his being liable for uncollected proceeds of sales.

The expression in journal form of the entries which he will have to make to adjust his own accounts is:

First Entry:

Merchandise, New Account, J. H.	$1,500.00	
To Merchandise, Old Account, J. H.		$1,500.00
To set up the inventorial value of my trading merchandise, as per inventory of		

Second Entry:

Profit and Loss	$3,825.00	
To Merchandise, Old Account, J. H.		$3,500.00
" Allowance to Customers, J. H.		25.00
" General Expense, J. H.		300.00
To close into profit and loss, the cost of the trading goods sold by me for my own account, and my expenses and losses of the period.		

Third Entry:

Sales, J. H.	$7,000.00	
Commissions, J. H.	551.40	
To Profit and Loss		$7,551.40

To close into profit and loss income obtained by me on the sales of my own trading merchandise, and the commissions which I have earned as factor, as follows:

Consignor No. 1	$401.50
Consignor No. 2	34.00
Consignor No. 3	115.90

Fourth Entry:

General Cash, J. H.	$2,661.40	
To Cash, J. H., Agent, Account No. 1		$2,401.50
" " " " " " 2		144.00
" " " " " " 3		115.90

For checks drawn to my order, in settlement of:

a. My advances to Consignor No. 1		$2,000.00
b. Expenses paid for the account of Consignor No. 2		110.00
c. Commissions on sales:		
Consignor No. 1	$401.50	
Consignor No. 2	34.00	
Consignor No. 3	115.90	551.40

The expression in journal form, of the entries necessary to adjust the accounts of the principals, is:

Consignor No. 1, Account Current	$1,613.50	
" " 2, " "	196.00	
" " 3, " "	393.10	
To Cash, J. H., Agent, Account No. 1		$1,613.50
" " " " " " 2		196.00
" " " " " " 3		393.10

For remittance to my principals, of the proceeds of the cash sales of the goods consigned to them, in accordance with the terms of my employment as factor.

At this point the trial balance of the factor's ledger will show:

Trial Balance

Of the books of John Harrison, Commission Merchant

(After Closing)

Furniture and Fixtures —J. Harrison	$ 3,000.00	Creditors—J. Harrison	$ 1,561.50
General Cash—J. Harrison	4,311.40	Notes Payable—J. Harrison	750.00
Customers—J. Harrison.	725.50	Profit and Loss—J. Harrison	3,726.40
Merchandise — J. Harrison	1,500.00	Capital—J. Harrison	3,499.00
	$ 9,536.90		$ 9,536.90
Consignment No. 1	$ 4,000.00	Consignor No. 1—Goods	$ 4,000.00
" " 2	3,500.00	" " 2 "	3,500.00
" " 3	1,660.00	" " 3 "	1,660.00
Promissory Notes—Consignor No. 3	150.00	" " 3 Account Current	650.00
Customers — Consignor No. 3	500.00		
	$ 9,810.00		$ 9,810.00
Total Debits	$19,346.90	Total Credits	$19,346.90

The nature of the account sales which the factor will have to render his principals, will be sufficiently explained by the following illustration:

Account Sales

New York, June 30, 1914

Sale of 40 Cases of Merchandise by John Harrison, Commission Merchant, for the Account of H. Marlow, Boston, Mass.

June 1, 1912	Received, by Steamer Commonwealth, freight and charges prepaid: 123 cases at $20.00	$2,460.00
" 30	Inventory: 83 cases at $20.00	1,660.00
	Sale of 40 cases—Consigned to me at $20.00	$800.00

Date		Cases	Sales Price		Proceeds
	Sales and Proceeds:				
	On Credit, 60 days:				
June 9	S. Muller, Hoboken, N. J..............	10	$29.00	$290.00	
" 15	Th. Kemp, Middletown, N. Y.......	7	30.00	210.00	$500.00
	On Credit, Secured by Note, 60 days:				
" 8	M. Turner, Buffalo, N. Y.............	5	30.00		150.00
	For Cash:				
" 20	S. Archbold, New York, N. Y......	18	28.277		509.00
	Total	40			$1,159.00
	Held until Collection, as per agreement:				
	Accounts Receivable.............			$500.00	
	Promissory Note................			150.00	650.00
	Proceeds Subject to Remittance....				$509.00
	Charges to Your Account:				
	Freight, Cartage, etc. (None)....			$.....	
	Allowances to Customers "			......	
	Commissions of 10% on all sales, as per agreement—My Check No. .... drawn against you....			115.90	115.90
	Net Cash Proceeds, Remitted Herewith, Check No.				$393.10

JOHN HARRISON,
Commission Merchant.

E. & O. E.

It will be noticed that the foregoing account sales gives, practically, a copy of the transactions recorded by the factor on his books. This is no more than he owes to his principals.

The account reflects the debits and the credits made to the consignment account (Dr. $2,460.00; Cr. $800.00), and the balance of the account ($1,660.00). It also re-

flects the credits given and the debits made to the current account of the consignee, and the balance of that account (Cr., $1,159.00; Debits: Commissions, $115.90; Cash, $393.10; Total, $509.00; Balance, $650.00) and finally, it gives the amounts debited to Cash, to Accounts Receivable, and to Promissory Notes Receivable, and the amounts credited to Cash.

Books of the Factor—Agency Accounts Kept in Separate Books

The second method differs from the first, only in that it compels the factor to keep, in connection with the agency work, a separate set of books comprising:

1. General ledger
2. Consignments received book
3. Consignment sales book
4. Agency cash book
5. Agency journal
6. Consignment customers ledger

Each book must be so arranged that all the transactions will be classified with due respect to the individual consignor whose accounts they affect. The accounts kept will be precisely the ones referred to in connection with the first method and the results obtained will be similar in every respect. Figures 35 and 36 illustrate forms of these books.

These books may be either loose-leaf, or bound. In either case as many pages are devoted to each consignment as may be needed according to the tenor of the agreement.

The space allotted to each individual consignor is earmarked by a tab bearing the number given to the series of accounts which contain all the transactions with him.

Reference to the consignment agreement, the number of which appears in the consignments received book, will give all required information when the occasion arises.

CONSIGNMENTS RECEIVED BOOK

M. Marcus, Boston, Mass. Consignor No. 3

CONSIGNMENT AGREEMENT No. ________ No. 3

When Received	Via	Shipping Charges		Consignments						Subsequent Charges	
		Nature	Amount	Description	Special Marks	Unit	Quantity	Price per Unit	Consigned Value	Nature	Amount
1912 Jan. 1	S.S. Commonwealth	None	—	Novelties	XXX	Case	123	20 00	2460 00	—	—

Figure 35. Consignments Received Book

CONSIGNMENTS SALES B

SALES FOR THE

CONSIGNMENT AGREEMENT

Debit							
Date	Voucher No.	Terms	Quantity	Price per Unit: Consigned Price	Price per Unit: Sale Price	Amount of Sale	Custome
1912 June 1	3.1	P.R. 60 ds.	5 Cases	20 00	30 00	150 00	M. Turner, Buffalo, N.Y.
9	3.2	Accep't 60 ds.	10 "	20 00	29 00	290 00	J. Müller, Hoboken, N.J.
15	3.3	do	7 "	20 00	30 00	210 00	Theo. Kemp, Middletown, N.Y.
22	3.4	Cash	18 "	20 00	28 [illegible]	505 00	J. Archbold, New York, N.Y.

Figure 36. Consignments Sales Book

The Recording of Consignments Inward—Occasional Consignee

The general books already described will be found to work to the satisfaction of the trader or manufacturer, who, for valuable consideration, is willing to sell goods for the account of others when the occasion arises; and this, whether or not he considers himself as a factor or as an agent. As to separate books, these are, of course, out of the question, so far as the occasional consignee is concerned.

The Occasional Consignee Theory

In connection with the recording of the transactions incident to the acceptance of occasional consignments inward, there exists a rather peculiar theory which apparently has been adopted by more than one of the schools where accounting is taught. Ignoring entirely the business of the factor, as well as the statutes which have been enacted both for his protection and for that of his principals, it takes the occasional consignee as a basis, and appears to be satisfied to establish a philosophical line of distinction between what it calls the two recognized methods which the science of accounting has placed at the disposal of the consignee for the recording of the transactions incident to his acceptance of goods on consignment, and to the sale thereof. The arguments on which this theory rests, are as follows:

First Argument and Method

While consigned goods are not an asset of the consignee, and do not raise the question of liability until sold, they must be reflected in the general books in order that all the facts relating to the operations of the period may be recorded, whether they be financial, historical, or statis-

tical. To effect this, the requirements of the following method must be met:

1. Upon receipt of consignments:
   a. Debit Consignment account:
      (1) With the disbursements incurred for freight, insurance brokerage, etc., which are to be eventually charged to the consignor.
      (2) With the consigned value of the goods.
   b. Credit consignors with the consigned value of the goods.
2. As sales take place:
   Debit customers and credit consignment account with the consignment value of the goods sold.
3. Monthly (or oftener if the agreement provided):
   a. Credit consignment and debit consignor with the expenses incurred for his account, as reflected by the Consignment account.
   b. Debit consignor and credit Commission account with commissions earned on sales, as per agreement.
   c. Debit consignor, and credit Accounts Payable, with the net amount due to consignors. If the liability to consignor is liquidated at once, debit the consignor, and credit Cash, or Notes or Accounts Payable, as the case may be.
   d. Credit consignment (old account) and debit consignment (new account) with the consigned value of the inventory remaining on hand.

At this point, the consignment account and the consignor's account would be equal. On the balance sheet,

show the consigned goods as an asset, and the consignor's account as a liability.

A slightly different handling, under this method, is to charge consignors and credit cash with the expenses incurred for their account, thus leaving the consignment account unaffected by the charges which the consignors have agreed to meet.

Second Argument and Method

Consigned goods not being assets of the consignee, and raising no question of liability until sold, should not be placed on the general books. The data concerning consignments should be kept in memorandum books from which the liability of the consignee to the consignor for goods sold, the charges to customers, and the debits and credits to other sundry accounts, can be abstracted periodically. To this effect, comply with the following rules:

1. When consignments are received:
   a. In the general books:
      Debit consignment with freight and expenses, and credit cash with the expenses incurred for the account of the consignors.
   b. In a memorandum consignment book:
      Record the receipt of the goods, stating in appropriate columns, the date of receipt, the name of the consignor, the consigned value, and, generally, any information which may be found useful either for purposes of identification or for purposes of bookkeeping.
2. When consignments are sold:
   Record, in a memorandum consignments sales book, the date of the sale, the amount sold,

the name of the customer to whom sold, the amount of sales returned, the allowances made for defective goods, the name of the consignor for whom sold, and any other useful information.

3. Monthly, or oftener if required:

   Prepare from the memoranda books, and submit to the bookkeeper, the following data which will permit him to journalize the facts concerning consignments:

   a. Names of consignors for whose accounts sales are made

   b. Names of customers to whom goods were sold

   c. Amount of sales, returns, allowances, etc.

4. From these facts, and the data concerning consignment expenses and advances, if any, on the general books, the general bookkeeper prepares the following journal entries:*

Customers' Controlling Account (say)	$20,000	
To Consignment Freight Expenses (say)		$ 60.00
" Commissions		2,000.00
" Accounts Payable		17,940.00

To charge the customers whose names follow, with the net sale price of consigned goods, and the consignors whose names follow, with the expenses incurred for their account and the commissions on the sales, and to transfer the net liability to consignors to accounts payable, as per accounting below:

* In connection with advances to consignors a second journal entry must be made, transferring to the debit of consignors, as appearing in the accounts payable, the amount of the account to which the advances were temporarily debited when made.

CUSTOMERS

Names	Gross Sales	Returns	Allowances	Discounts	Net Sales

CREDITORS

Names	Consignment No.	Gross Sales	Commissions	Freight and Expense	Returns, Allowances and Discount	Net Liability

5. On the balance sheet, show neither the item "Consignments" nor the item "Consignors."

The soundness of the foregoing theory is challenged, because it causes the facts to be recorded illegally, and because it ignores the rights, privileges, and duties of the consignee. Why should a consignee increase the book amount of his creditors' accounts to the extent of sales of consigned goods sold on credit, when it is a fact that he is not liable for them until the customers' accounts are collected, unless he has specifically agreed to hold himself so liable? Correspondingly, why should he deliberately distort the truth by showing among his assets, "Customers' Accounts Receivable," which not only do not belong to him, but which the law forbids him to mix with his own? Lastly, why should he expose himself to expensive and discreditable litigation by preparing a balance sheet showing an item "Cash in Banks" which contains moneys to which he has no right whatever?

CHAPTER XVIII

CONSIGNMENTS—SHIPMENTS OUTWARD

Accounting Methods

In connection with the recording of the transactions incident to the shipment outward of goods consigned, we are again confronted with several accounting methods, revolving around the following hypotheses:

1. The goods consigned outward are credited at cost to the account with merchandise, and consigned at cost.
2. The goods consigned outward are credited at sale price to the account with merchandise, and consigned at sale price.
3. The goods consigned outward are not credited to the account with merchandise, and are consigned either at cost or at sale price.

The object of the first method is to differentiate the gross profits made by the concern on the goods sold by its own organization, from the profits made on goods introduced in domestic or foreign markets through the medium of consignees.

The object of the second method is to treat goods consigned outward, precisely as if they were sold by the concern itself, or held by it at inventory times.

The object of the third method may be the same as that of either of the other two, the distinction being that instead of recording the transactions in the real accounts as they stand on the books, there is created during the

accounting period a series of statistical accounts which appear either in the general books or in memoranda books, and permit of periodically ascertaining the effect of consignments upon the real accounts, as well as upon the income of the concern.

First Hypothesis

Considering the first hypothesis and assuming that there were consigned goods worth $1,000, the journal entry giving expression to the facts would be:

Consigned Shipment No. 1.....	$1,000.00	
To Merchandise.........		$1,000.00
For cost of goods consigned to John Doe, for sale by him subject to the following conditions: (Recite conditions.)		

Supposing, now, that part of the goods consigned outward had been sold by the consignee for $1,000, subject to commissions of $100, freight and expenses amounting to $35, and refunds to customers for defective goods, amounting to $15, as per account sales rendered by consignee to consignor, showing a remittance of $850 and a remaining inventory of $500 figured at cost. The expression of the above facts in general journal form might be as follows:

1. Cash	$850.00	
Commissions on Consigned Shipment No. 1......	100.00	
Allowances on Consigned Shipment No. 1.......	15.00	
Freight and expenses on Consigned Shipment No. 1....................................	35.00	
To Consigned Shipment No. 1...........		$1,000.00
To record the transactions of the period in connection with goods consigned outward, as shown by the account sales rendered by John Harrison.		

2. Consigned Shipment No. 1 (new account).......	$500.00	
To Consigned Shipment No. 1 (old account)		$500.00
To set up the inventory as shown by schedule attached to account sales rendered this day by consignee.		
3. Consigned Shipment No. 1......................	$500.00	
To Profit and Loss.......................		$500.00
For gross profit on sales of goods consigned outward.		
4. Profit and Loss................................	$150.00	
To Commissions on Consigned Shipment No. 1..............................		$100.00
" Allowances on Consigned Shipment No. 1..............................		15.00
" Freight and Expenses on Consigned Shipment No. 1....................		35.00
To close into the Profit and Loss account the expenses incident to consigned shipments, and the allowances on defective goods.		

After the foregoing entries have been posted, the status of the account "Consigned Shipment No. 1" is as follows:

CONSIGNED SHIPMENT NO. 1

Merchandise (cost)......	$1,000.00	Sundry	$1,000.00
Profit and Loss..........	500.00	Inventory (cost)........	500.00
	$1,500.00		$1,500.00
Inventory (cost)........	500.00		

Thus, we see that the purpose of this method is fulfilled through the raising of an account which will separate the goods consigned from the merchandise to be sold by the concern itself, and subsequently record only such transactions as contribute to the gross profit on sales, either in a positive or in a negative manner. As to the expenses and losses incurred as a result of the consign-

ment, they were recorded in properly earmarked nominal accounts which will eventually be closed into Profit and Loss, where they will be opposed to the gross profit on consignments, in order that the selling profit thereon may be ascertained.

Second Hypothesis

Under the second hypothesis the goods consigned outward are credited at sale price to the account with merchandise and consigned at sale price. Let us consider the case of goods costing $1,000, consigned outward at their sale price of $1,500, subject to a commission of 10% on the sale price. In due course, the consignee renders an account sales showing that he has sold goods to the amount of $1,000, and submits an inventory showing that he still has on hand goods worth, at sale price, $500. He claims allowances of $15 refunded to customers on account of defective goods, and freight and expenses of $35, both of which the consignor must stand; he also takes credit for his commission and for his cash remittance.

The entries necessary to record these transactions on the books of the consignor might be expressed in general journal form:

1. Consigned Shipment No. 1....................	$1,500.00	
To Merchandise........................		$1,500.00
For $1,000 worth of goods consigned at sale price to John Harrison, consignee.		
2. Cash (Consignee No. 1)......................	$850.00	
Commissions on Consigned Shipment No. 1....	100.00	
Allowances on Consigned Shipment No. 1......	15.00	
Freight and expenses on Consigned Shipment No. 1....................................	35.00	
To Consigned Shipment No. 1..........		$1,000.00
To record the transactions of the period in connection with goods consigned outward, as shown by account sales rendered by John Harrison.		

3. Consigned Shipment No. 1 (new account)......	$500.00	
To Consigned Shipment No. 1 (old account).............................		$500.00
To set up inventory, as shown by schedule attached to account sales rendered this day by consignee, John Harrison.		

4. Profit and Loss..............................	$ 150.00	
To Commissions on Consigned Shipment No. 1.............................		$100.00
" Allowances on Consigned Shipment No. 1............................		15.00
" Freight and Expenses on Consigned Shipment No. 1..................		35.00
To close.		

At this point, the status of Consigned Shipment Account No. 1 would be:

CONSIGNED SHIPMENT NO. 1

Merchandise (sale price)	$1,500.00	Sundry	$1,000.00
		Inventory	500.00
	$1,500.00		$1,500.00
Inventory	500.00		

while the status of the account with merchandise would be:

MERCHANDISE

Purchases (say)........	$20,000.00	Sales—Concern (say)..	$10,000.00
		Sales—Consignee (Shipment No. 1.)..........	1,500.00

If, in the above example, all the goods consigned had been sold at the end of the accounting period, it would appear that the method of handling consignments had adequately fulfilled its purpose. But since all the goods have not been sold, and since, further, the consignor

wishes to close his books and ascertain his profit, it is necessary to temporarily relieve the merchandise account of the gross profit on goods consigned outward, which was included in the account at the time of the consignment. This is done by means of the following journal entry:

Merchandise	$500.00	
To Consigned Shipment No. 1		$500.00
To send back to the former account, at the value at which it was formerly credited thereto, the remaining inventory of goods shipped outward on consignments.		

As soon as the profit of the period is ascertained, the above entry is reversed.

Third Hypothesis

Under the third hypothesis, goods consigned outward are not credited to the account with merchandise, and are consigned either at cost or at sale price. Two methods of recording are available.

First Method

1. If goods are consigned at cost price, record the material facts relating to the consignments outward, as follows:

a. When shipping goods on consignment:

Debit Consignee No. — Credit Consigned Shipment No. —	with cost of the goods shipped.

b. When consignee renders account sales:

(1) Debit Profit and Loss Credit Consignee No. —	with the commissions, expenses, and allowances.
(2) Debit Consignee No. — Credit Profit and Loss	with gross profit on sales as reported and collected.
(3) Debit Cash Credit Consignee No. —	with remittances on account of collected sales.
(4) Debit Consigned Shipment No. — Credit Merchandise	with the cost price of goods sold on consignment.

2. If goods are consigned at sales price, record the facts relating to consignments outward as follows: ,

a. When shipping goods on consignment:

Debit Consignee No. — Credit Consigned Shipment No. —	with the sales price of goods consigned.

b. After consignee has rendered account sales:

(1) Debit Profit and Loss Credit Consignee No. —	with commissions, expenses, and allowances.

(2) Debit Consigned Shipment No. —	with proceeds of goods sold.
Credit: (a) Merchandise	with the cost of the consigned goods sold for cash.
(b) The Profit and Loss Account	with the gross profit on the sales of consigned goods.
(3) Debit Cash Credit Consignee No. —	with remittance.

To illustrate this first method available under the third hypothesis, let us assume that goods costing $2,000 have been consigned to John Harrison, (1) at cost, (2) at sale price, and that, in either case, the consignee has sold a certain amount of goods the cost of which was $1,000 to the consignor. The consignee renders an account sales, deducting from his remittance 10% for commissions on gross sales, $35 for allowances to customers, and $75 for expenses paid by him for the account of the principal.

The ledger accounts of the consignor, as affected by both assumptions will be:

Example No. 1

(Ledger accounts of the consignor, as affected by the recording of the transactions incident to the consignment of goods at cost, and to the partial sale thereof by the consignee.)

Consignee No. 1—J. Harrison

Consigned Shipment No. 1 ....$2,000.00	Profit and Loss—Commissions ....$ 150.00

CONSIGNEE NO. 1—J. HARRISON—*Continued*

Profit and Loss—Excess of sale price over cost, on sale of consigned goods, i. e., gross profit on sales	500.00	Profit and Loss—Allowances	35.00
		Profit and Loss — Expenses	75.00
		Cash—Remittance	1,240.00
		Balance	1,000.00
	$2,500.00		$2,500.00
Balance	$1,000.00		

CONSIGNED SHIPMENT NO. 1

Merchandise (Cost of Consignments sold)....	$1,000.00	Consignee No. 1.........	$2,000.00
Balance	1,000.00		
	$2,000.00		$2,000.00
		Balance	$1,000.00

CASH

Consignee No. 1.........	$1,240.00		

PROFIT AND LOSS

Consignee No. 1— Commission, Consignment No. 1...........	$150.00	Consignee No. 1—Gross Profit on Consigned Shipment No. 1.............	$500.00
Allowances on Consignment No. 1...........	35.00		
Expenses on Consignment No. 1...........	75.00		

MERCHANDISE

Purchases—say:	$10,000.00	Sales by the concern itself, say:	$6,000.00
		Consigned Shipment No. 1—Cost of goods consigned and sold, gross profit on which is recorded in the Profit and Loss account..........	1,000.00

Example No. 2

(Ledger accounts of the consignor, as affected by the recording of the transactions incident to the consignment of goods at sale price, and to the partial sale thereof by the consignee.)

Consignee No. 1—John Harrison

Consigned Shipment No. 1	$3,000.00	Profit and Loss—Commissions	$ 150.00
		Profit and Loss—Allowances	35.00
		Profit and Loss — Expenses	75.00
		Cash—Remittance	1,240.00
		Balance	1,500.00
	$3,000.00		$3,000.00
Balance	$1,500.00		

Consigned Shipment No. 1

Merchandise	$1,000.00	Consignee No. 1	$3,000.00
Profit and Loss—Gross Profit	500.00		
Balance	1,500.00		
	$3,000.00		$3,000.00
		Balance	$1,500.00

Cash

Consignee No. 1	$1,240.00		

Profit and Loss

Consignee No. 1—		Consigned Shipment No. 1	$500.00
Commissions	$150.00		
Allowances	35.00		
Expenses	75.00		

Merchandise

Purchases—say:	$10,000.00	Sales by the concern, say:	$6,000.00
		Consigned Shipment No. 1	1,000.00

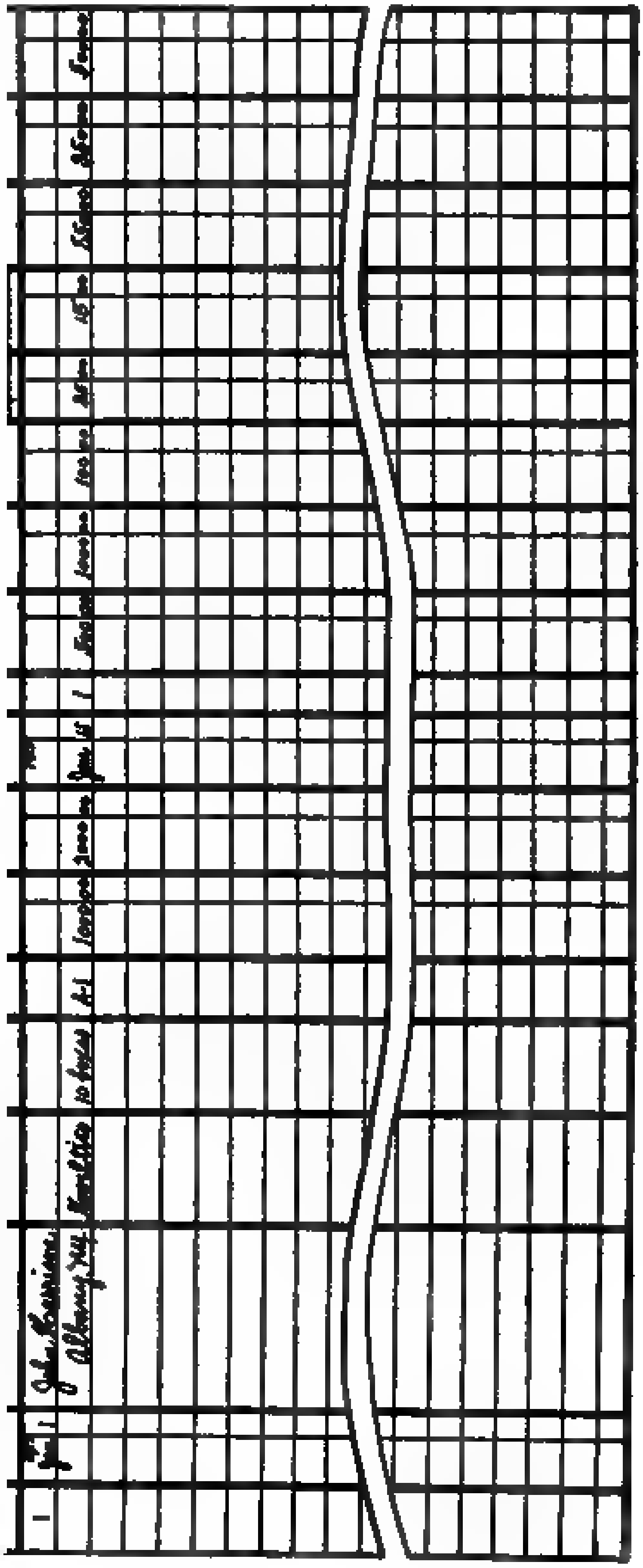


Figure 37. Consigned Shipments Memorandum Book

After the accounts are closed as shown in the foregoing examples, the account of the consignee and the account with consigned shipment are purely statistical, and have no place on the balance sheet.

Second Method

1. If goods are consigned at cost:

a. When shipping:

Record the facts relating to consignments in a memorandum book, as per example on page 218, and make no entry whatever in the general books.

b. After receipt of account sales:

Record the facts contained therein, in the memorandum consigned shipments book, as per example in Figure 37.

c. At any time during the accounting period, using the data furnished by the memorandum book, make in the journal and in the cash book the entries expressed here in general journal form:

Cash	$850.00	
Commissions—Consigned Shipment No. 1	100.00	
Freight and Expense on Consigned Shipment No. 1	35.00	
Allowances to Customers on Consigned Shipment No. 1	15.00	
To Merchandise		$500.00
" Profit and Loss		$500.00
To record the transactions of the period concerning consignment No. 1, in so far as they have affected the assets		

and the income, as per account sales No. —— received this day from Consignee No. 1, and as reflected by the memorandum consigned shipments book. The amount credited to *merchandise* is *the cost* of the goods sold.

2. If the goods are consigned at sales price, plan the memorandum consigned shipments book in such a manner that the cost of the goods will be opposed to the sale price, as well when they are consigned as when they are sold. The journal entry to be made at the time the account sales is rendered, is identical in every respect with the above.

Before leaving the subject of consignments, it may be well to state that since the consignee is not liable for uncollected sales unless he has agreed to hold himself so liable, the consignor should not consider as sales what has been sold on credit. Unless this be done, there will exist no harmony whatever between the books of the principal and of the agent; the books of the consignor will show that he has a claim against the consignee, whereas the latter's books will fail to reflect a liability therefor.

CHAPTER XIX

LAND AND BUILDINGS

Distinction Between "Land" and "Buildings"

To the average layman, there is no difference between the two elements of the account "Land and Buildings." Giving as his authority the common law, which made the term "real" apply to land, tenements, and hereditaments, he is satisfied to call both real estate. The courts do not usually attempt to differentiate the two terms, except in special cases, as that of Truesdell *v.* Gay,* where the court, referring to the word "building," seemed to be of the opinion that, taken in its broadest sense, it could not be made to apply to such erections on land as fences, gates, and other such structures. The accountant, however, must often draw a very sharp line not only between the two values, land and buildings, but as well, between that part of the land which is necessary to the proper working of the plant, and that part which could be sold without in any way interfering with its operations.

The components of the cost of plant land vary materially from those of investment land; the consideration of increases in market values, while of much importance in the case of the latter, is merely an incident in the case of the former, since the asset cannot ordinarily be sold without causing operations to come to an end, at least temporarily. On the other hand, buildings depreciate through wear and tear, while land does not;

* 13 Gray (Mass.), 311, 312.

hence, if reserves are created for the depreciation of buildings, and applied for balance sheet purposes to Land and Buildings account, it is not possible to ascertain the book value of the asset which the depreciation affects.

These accounting differences in the nature of the two values, land and buildings, would seem to be sufficient to cause the creation of two distinct accounts with them, and are generally so regarded.

Plant Land

That part of the land which the buildings occupy, or which is necessary to the proper working of the plant, should be kept by itself in the account "Plant Land."

As part of the plant, land may be charged at the time of acquisition, not only with the cost of purchase, but with all the expenses incident thereto, such as title searching and insuring, commissions to real estate agents, recording of deeds, etc. After it has been acquired, and until operations have begun, it can be charged with interest on the purchase-money mortgage (or on any other obligation incurred in its acquisition) and with the cost of fencing, erecting gates and approaches, filling in, draining, leveling, etc., incident to the erection of the plant. As soon, however, as the plant has begun operations, the value of plant land can only be increased by the cost of such improvements as enhance the efficiency of the buildings erected thereon, or increase their useful life by remedying conditions which tend to make structures deteriorate faster than might reasonably be expected.

The question of cost of improvements which tend to make plant land more valuable for any purpose other than the one for which it was acquired, while admittedly important in determining its cost if a sale is contemplated, should not be permitted to influence the appraisal of values for the purposes of a going concern.

Investment in Lands

Any parcel of land owned and not at present necessary to, and not likely to be required for, the operations of the plant, is essentially an investment. The true reason for acquiring it may not have been a desire for profits. It may be that in order to obtain a desirable plot it was necessary to purchase adjoining land which had no special value for the purpose of the plant; or it may be that the purchase was made with a view of preventing the erection in the immediate neighborhood of competing or light-obstructing plants; whatever the reason, a certain amount of capital has been used for the acquisition of a value not required for operating, and the cost of carrying it may properly include betterments, maintenance of fencing, taxes, interest on the purchase-money mortgage, etc., even after operations have begun.

Buildings

The Buildings account is capable of apparently harmonious action, even though elements which are really foreign to it are introduced in its make-up. Therein lie both its importance and its danger.

If we were to attempt to inject into the account with customers, transactions which have no relation whatever with sales and settlements thereof, we would obtain results which, by comparison with others, would carry on their face the evidence of inaccuracy. If, on the other hand, we were to include on either side of the account with merchandise, elements of cost and elements of deduction from cost which have no relation whatever with merchandise, we would distort the truth about certain phases of the profits, but we would not change the net result of the operations of the period.

In the case of buildings, however, the situation is quite different. The account offers the opportunity of

capitalizing expenditures in order that the profits of the period may be inflated, or of reducing the income by charging to revenue the cost of adding to, or enlarging, the structures, as well as the cost of extending their useful life, which should have been capitalized. That concerns have frequently taken advantage of that opportunity is not to be doubted; that it can be done successfully and, it may be said, without much danger, is due to the fact that the standards by which the components of the Buildings account (in common with all other so-called property accounts) are judged, may be stretched to accommodate any personal opinion not too grossly unreasonable.

The original cost of the buildings is seldom a question at issue so far as the accountant is concerned. If the buildings have been acquired from another concern, he is not competent to pass judgment upon the price paid for them; nor is he asked to do so. All he has to do is to record the transaction. If the buildings have been erected under a contract, the situation is precisely the same; if they have been constructed by the concern itself under a special contract calling for the payment to the builder of a certain percentage of the cost, the true cost of the buildings will, of course, be whatever has been expended under the direction of the builder, plus the fees paid to him as per contract. In this latter case the interest on the money which the concern may have had to borrow pending construction, in order to meet the bills of the builder, will also be considered as a proper cost of the structures. Lastly, if the construction is attended to by the concern itself, upon plans submitted by an architect, the cost of the building will include his fees, the expenses incurred in connection with permits, licenses, etc., the cost of insurance protection, the cost of all material used, the cost of the labor expended on the foundations as well as on the structures, the cost of any outside labor which may

have been required, the proportion of the overhead expenses which apply to the construction, the interest on any moneys which have been borrowed for construction purposes and used therefor, up to the time when the new buildings were opened for operation.

In regard to what constitutes the cost of material, supplies, and labor consumed in construction, the rulings of the Public Service Commission are of interest to all concerns, whether or not they fall under the class of business organizations which the commission controls, for they embody the views which accountants generally hold on the subject.

"Cost of labor (employed in construction) includes not only wages, salaries, and fees paid employees, but also such personal expenses of employees as are borne by the corporation. Cost of materials and supplies consumed in construction, is the cost at the places where they enter into construction, including cost of transportation and inspection when specifically assignable. If such materials and supplies are passed through storehouses, their cost as entered in the account may include a certain proportion of store expenses."

It is an open question as to whether or not it is proper to add to the overhead expenses applicable to construction, an extra amount representing the profit which a contractor would have added to the price quoted for the buildings. It is claimed by some that the cost of the buildings constructed by a concern for itself, presumably because it can erect them at better terms than would be possible if the work were given to contractors, should be such as to reflect the saving realized by the company. It is claimed by others that the cost to the company may be stated at a figure representing precisely what it would have had to pay if outsiders had attended to the construction. This latter theory may appeal to the statis-

tician and to the independent appraiser, but its effect upon the results of the operations is so marked as to be obnoxious to the accountant. Assuming, for instance, that a company were to build an additional plant during a certain operating period, and add to the cost of the building an amount of overhead expenses calculated to cover not only the proper proportion which the work performed would naturally warrant, but, as well, the profits which a contractor would have realized on the work, it stands to reason that the results of the operations of that period may show improvements over past periods which disturb comparisons and lead to erroneous judgment of conditions in regard to carrying capacity.

After the original cost of buildings has been recorded, all subsequent charges to the account raise the ever-present and delicate question of the proper separation of capital expenditures and revenue expenditures.

Capital Expenditures

When subjected to a theoretic analysis, this term appears to apply to such expenses as, in the aggregate, represent the cost of the increased earning capacity of the enterprise as a whole or of particular parts thereof, which has been secured over the earning capacity known to exist before the said expenses were incurred.

Revenue Expenditures

In contradistinction, these expenses are such as must be incurred in order that advantage may be taken of the earning capacity of the enterprise, or in order that such capacity may be maintained at the required standard.

If the radius of action of a locomotive is 200 miles on a certain amount of fuel, water, and lubricants, and, if through the addition of, say, a steam condenser to the mechanical equipment of the engine, that radius is ex-

tended to 250 miles on the same consumption of fuel, water, and lubricants, it is obvious that the value of a capital asset has been enhanced as an income producer, and that the cost of the increased earning power may be capitalized. But if, on the other hand, the additional equipment of the machine has only resulted in maintaining an efficiency which would otherwise have been impaired, there has been incurred an expense necessary to obtain revenue, that is to say, a revenue expenditure.

Writing on the subject of "The Accounting of Industrial Enterprises,"* William M. Lybrand, C.P.A., says: "With respect to items which may properly be considered as capital expenditures, it has been suggested as a working basis that no addition should be made to the property accounts unless it can be clearly shown that they have increased the earning capacity of the plant. A simple, positive rule such as this might be all that is required, if the changes in the plant and the resulting increase in earning capacity were occasioned only by actual extensions or additions of property which had never before existed. But such is not the case. In every progressive manufacturing concern, alterations or additions to the plant are constantly being made for the purpose of simplifying the manufacturing processes and thereby increasing the output with the same expenditure for labor and materials, or in order to decrease those operating charges which are in the nature of overhead expenses required to be taken up in the cost of the product. As no alteration or addition to the plant is probably ever undertaken except for the purpose of increasing the earning capacity thereof, directly or indirectly, the literal application of the rule referred to is not possible, and it will be necessary to consider the nature of the various alterations, improvements, and additions, before an intelligent decision can be made as to their ultimate disposition."

* *Journal of Accountancy*, December, 1908.

In the *Journal of Accountancy* of November, 1906, John P. Herr says on the same subject:

"One of the most difficult things with which the accountant has to deal is the question of capital expenditures * * * As capital expenditures are generally handled at the present time, a manager who has interest in the profits * * * may cover up shrinkages in the net earnings, losses by bad management, and defalcations, and make it practically impossible for the accountant * * * to determine whether the charges are for bona fide betterments or not * * * We find in one work on accounting a statement that when in doubt as to whether an expenditure is a capital expenditure or chargeable against revenue, the amount should be charged against capital, the reason given being that if it is 'afterwards' determined that the expenditures were for repairs, it is easy to get them out of capital into revenue, while it is extremely difficult without much explanation and on proper authority to take items out of revenue and place them into capital. The adoption of such a policy by accountants will add to the already great laxity in this direction, and tend towards the lowering of professional standards."

As bearing upon the subject of capital expenditures, the following quotations from a pamphlet issued by the Public Service Commission, First District, State of New York, may be of interest:

Additions. "Additions include additional structures, facilities, or equipment not taking the place of anything previously existing."

Betterments. "Betterments include the enlargement or improvement of existing structures, facilities, and equipment."

Renewals. "Renewals include all extensions of terms of years in land and tangible fixed capital, and all exten-

sions of the life period of franchises and other intangible fixed capital."

Replacements. "Replacements include all substitutions for capital exhausted or become inadequate in service, the substitutes having substantially no greater capacity than the things for which they were substituted. When a substitute has a substantially greater capacity than that for which it is substituted, the cost of substitution of one of the same capacity as the thing replaced should be charged as a replacement, and the remaining portion of the cost of the actual substitute should be charged as a betterment."

Repairs. "When through wear and tear or through casualty it becomes necessary to replace some part of any structure, facility, or unit of equipment, and the extent of such replacement does not amount to a substantial change of identity in such structure, facility, or unit of equipment, the replacement of such part is to be considered a repair, and the cost of such repair is to be treated as an operating expense, and must not be charged as a replacement in any capital account."

In connection with land and buildings there often arises the question of increased valuation due to favorable conditions in the real estate market. Concerns desiring to make a good showing for a given period, are not unlikely to take advantage of upward fluctuations of land, in order to inflate their "profits." The accountant is very likely to have in connection with this kind of profits the same opinion as the average lawyer has about all kinds of gains. To the lawyer, nothing is profit which has not been realized in cash. To the accountant, nothing brings profits which has not been sold. He instinctively objects to all kinds of estimates and inflations of capital assets on the basis of market values. He is inclined to think that since business requires its capital assets in order to oper-

ate, it cannot afford to sell them; hence, the taking of profits on values supposed to be invested permanently, might well be deferred until they are sold, either because operations have come to an end or because more favorable conditions elsewhere have made advisable the removal of the plant.

CHAPTER XX

BUILDING EQUIPMENT, FURNITURE AND FIXTURES, DELIVERY EQUIPMENT, PATTERNS, OTHER EQUIPMENT

Realty Fixtures and Personalty Fixtures

The question of the proper differentiation of realty fixtures and personalty fixtures is of interest to accountants, since it involves the possibility of lawsuits in connection with the foreclosure of mortgages on buildings and on their equipment, the rights of the parties to a contract of sale of realty, the rights of the landlord and of the tenant, and the important matter of accurate accounting in connection with bankruptcy proceedings and receiverships.

Realty fixtures are part of the building to which they are annexed, and their value should either be added to the value of the building, or stated in a separate account with building equipment, or in a group of accounts representing that equipment. Personalty fixtures are neither part of the building nor of its equipment; they are not considered as part of the property pledged under a mortgage, and they can be sold, removed, changed, destroyed, or otherwise disposed of, without in any way affecting the value of the building or the rights of any one who has, or may have, an interest in the structure.

Realty fixtures may, under certain conditions, include elements which accountants are sometimes satisfied to call "machinery" or "machinery and tools." When such is the case, what is the worth of the information supplied by books

of account which state the value of the asset "buildings," in the narrow sense which the word may have, and oppose it to a liability account reflecting the mortgage which has been placed not only on the structure, but, as well, on all that it contains which falls under the meaning of the term "realty fixtures" as the law understands it?

Going a little further, what is the value of a statement of affairs which deducts from the amount expected to be realized on buildings, the amount of the mortgage placed thereon, if part of the value of the said building is to be found in the account "Machinery and Tools"?

The Law of Fixtures

The Cyclopædia of Law and Procedure states that "the law of fixtures deals with property whose status as realty or personalty is indeterminate until the proof of certain facts and the application of certain rules of law. When the status is thus determined, tangible property must be either real or personal. Fixtures then may be defined as tangible property whose status as realty or personalty is indeterminate. According as certain facts shall appear, its status will become determinate, and it will fall into one or the other category * * * In the matter of "fixtures" so called, it is difficult to say with precision what degree of annexation is sufficient to work the change from personalty to realty. In some cases the courts have said as a matter of law, that certain articles, although fastened to the realty, are no part of it, while on the other hand articles may be so incorporated with realty that the court will say as a matter of law that they are fixtures; but as physical annexation of a chattel alone is not always necessary to its becoming part of the realty, and as physical annexation alone does not necessarily make a chattel realty, but in either case other circumstances may combine to prevent the one or the other, it is believed that the true rule is that articles not otherwise

attached to realty than by their own weight are *prima facie* personalty, and articles affixed to land in fact, although only slightly, are *prima facie* realty, and that the burden of proof is on the one contending that the former is realty and that the latter is personalty."

It has been held by courts of law that a heavy statue, designed for permanent ornamentation of a building, is part of the building, and subject to a mortgage of that building;[1] that a machine which is attached to its base merely to give it stability, is not part of the building;[2] that shelving attached to the walls merely to give it steadiness is part of the building;[3] that a machine attached to the floor to give it steadiness, when it is attached otherwise than by cleats, is part of the building;[4] that platform-scales erected in the street, but with beams extending into an adjoining building, are part of the building;[5] on the other hand, belting, gas fixtures, and radiators have, in some cases, been held to be realty, while in other cases they have been held to be personalty.

Distinction Between Realty and Personalty Fixtures

In view of the many differences of opinion which the decisions of the courts suggest in the matter of fixtures, it seems that the rule contained in the foregoing quotation from the Cyclopædia of Law and Procedure may safely be accepted by accountants. Thus, everything permanently attached to the building and impossible of removal without cutting into walls, ceilings, and floors, or without impairing the fitness of the building for the purpose to which it was destined, may be properly included in the cost of the building, or kept in a separate account with building equipment or with realty fixtures. Everything which is attached to the

[1] Snedeker *v.* Warring, 12 N. Y. 170.
[2] McRea *v.* Troy Cent. Nat. Bank, 66 N. Y. 489.
[3] Stack *v.* T. Eaton Co., 4 Ont. Rep. 335.
[4] Sun L. Ass. Co. *v.* Taylor, 9 Manitoba 89.
[5] Bliss *v.* Whitney, 9 Allen (Man.) 114; 85 Am. Decennial 745.

building by its weight only, and can be easily removed without in any way interfering with the efficiency of the building, or defacing it, may be called furniture and fixtures.

In the former category we would then include: boilers and furnaces imbedded in the floors or walls, machines sunken in the floor or attached to it in such a manner as to be part of it, elevators and the machinery on which they depend for power, ventilating systems, water connections, piping, feeding wires, inside sewerage and drainage systems, crane runners and supports, shafting and pulleys which are so encased in the walls and ceilings as to necessitate cutting in order to remove them, safes, closets, benches, and shelving built in the walls or permanently attached to them, etc.

In the second category (furniture and fixtures) we would include chairs, tables, desks, pictures, and other removable decorative objects, files and cabinets, writing, copying and computing machines, safes not attached to the walls, lamps and chandeliers, movable stoves and radiators, and generally all the appliances, implements, etc., acquired to facilitate the transaction of business, or add to the comfort of the officials, employees, and patrons of the concern.

It is to be understood, of course, that the segregation of the building into its components, such, for instance, as general building equipment, power plant equipment, boiler plant equipment, heating plant, etc., is not condemned, provided the sundry units are understood to be part of the whole, detached for purposes of recording analytically the original cost of the units and the subsequent transactions affecting them.

Furniture and Fixtures

The Furniture and Fixtures account has no well-defined theory: what it will contain depends upon the policy of the concern as to what it will capitalize and what it will charge

to operations. Some firms carry their furniture and fixtures at their original cost, and charge all subsequent additions, renewals, and repairs to the income of the period in which the transactions occurred; others add to the original amount the cost of what they buy, and credit the account, periodically, with an amount representing the difference between the book value and the total inventory computed conservatively; others still, add the cost of additions to the original value, and set aside yearly out of profits an amount which is credited to a reserve account and is supposed to reflect the amount of depreciation suffered by the property during the period.

Delivery Equipment

The somewhat antiquated title of Horse, Wagon, and Harness, which was formerly applied to this account, is frequently replaced, in these modern days of motor trucks and light-power delivery wagons, by the name "Delivery Equipment." What the account will contain depends upon the policy of the concern. It is supposed to include the cost of such equipment as is necessary to cart the goods in and out of the plant. Like the asset "furniture and fixtures," it may be carried at its original cost, all replacements and additions being charged to expense; or the original value may be added to whenever transactions take place, the true value being obtained through periodical inventories figured conservatively. Or again, it may be carried at cost, a certain amount being periodically set aside out of net profits to provide for such depreciation as it is estimated that the property may have suffered.

If losses occur either through natural causes or through accidents, the account is credited with the original, or with the depreciated, cost of the unit lost (as the case may be) and is then debited with the cost of the unit which replaces it.

Patterns

A pattern is "a piece of paper, card-board, sheet metal, or thin plank corresponding in outline to an object that is to be cut out or fabricated, and serving as a guide in determining its exact shape and dimensions. Pattern pieces or gauges are largely used in making special machinery, in which all the parts are made separately by gauges, and then put together."*

The value at which patterns should be carried on the books is, of course, their cost; that is to say, the amount of all the expenses which their fabrication has necessitated. But, as the value of the pattern is problematic after the object for which it was made is accomplished, the question of the ultimate disposition of the asset is important.

The patterns made for a special machine, which will not be used elsewhere than in the plant of the concern which built it, have no value unless there is a probability that the apparatus will be duplicated at some future time. Hence, if the machine is to be the only one of its type, the cost of the patterns is an integral part of the cost of the machine. In the contrary case it may be retained as an asset, at cost. If, peradventure, the object for which a pattern is made becomes useless through obsolescence of the type, the pattern itself necessarily loses its value.

Patterns made to standardize the object manufactured, and used constantly as models, may be retained as an asset at whatever cost they represent. If their usefulness has expired, they should be written off gradually by periodical charges to the Profit and Loss account; or a reserve may be created for them pending final decision as to their ultimate disposition. Under no conditions, however, should they be charged to cost of manufacture unless they were made for a special job and there is no possibility of their being used again.

* Encyclopædic Dictionary.

Other General Equipment

The theory of other property accounts which, for the sake of financial statements, may be grouped under this title, such, for instance, as Fire Apparatus, Emergency Equipment, etc., is substantially the same as the theory of the account "Delivery Equipment."

CHAPTER XXI

MACHINERY AND TOOLS

Classification of Machinery and Tools

Although comparatively few concerns attempt to make their accounting differentiate the components of this account, it may be better to subdivide the subject matter into its units which, for ordinary manufacturing businesses, may be substantially as follows:

1. Machines; that is to say, such machines as are attached to the floor or to benches or to their bases by their weight only, or in such a manner as not to make them part of the building.
2. Machine Tools.
3. Shop and Hand Tools.

As opposed to the machine tool, the machine proper is that part of the whole apparatus which, by itself or through auxiliary devices, produces the required motion; the machine tool, on the other hand, is the part of the machinery which performs the final function for which the apparatus as a whole was constructed. As to the hand and shop tool, it has nothing whatever to do with either. Taking as an example a milling machine, we find it defined in the "Encyclopædic Dictionary" as: "a machine for dressing metal work to shape, by passing it on a travelling-bed beneath a rotating serrated cylindrical cutter." In a machine of this type the part of the apparatus which produces the motion necessary to carry the object to be dressed in the proper position under the cutter, is the machine proper, whereas the cutter is the machine tool.

The distinction may not appear important at first, but becomes so when it is considered that while the cost of the original tool equipment (which may comprise several cutters) is proportionately greater than that of the machine, the life of the machine may extend over a period of twenty years or more, whereas the cutter may be destroyed the first time it is used, either owing to a flaw in the material of which it is made, or through careless or faulty adjusting.

Machine and Tool Accounting

If the value of the machine and of the machine tools is stated in one account, and one of the cutters is destroyed, the account must be credited at once with the loss sustained; or the recording of the loss may be postponed until the taking of the physical inventory at the end of the period; but in either case, the value of the machinery and tools asset must be reduced to the value of its remainder. This necessitates the keeping of a special machinery ledger containing an account with each machine.

If, on the contrary, two accounts were created, one for machines and another for machine tools, a list of the machines could be made once for all, stating the date at which they were acquired, their cost, their estimated life, their residual value, their factory number, their location on the floor of the plant, and the rate of depreciation which is applied to each unit for purposes of reserves. This list would constitute a permanent inventory, subject only to additions and deductions due to the acquisition of new units or to the discarding of units whose life has expired.

As to the machine tools, the fact that they are carried in a separate account makes it possible to place them in the custody of the storekeeper, to control their issue to the factory, and to obtain a periodical book-inventory probably more valuable than a physical one, since it can be readily checked and priced.

Universal Machines

In regard to machines, they may, if the occasion arises, be subdivided into two distinct accounts, one containing the value of the universal machines, the other the value of the special machines.

Universal machines are those which are built according to a standard, and are used by all industries where the work to be performed calls for the application of familiar principles of mechanics. Special machines, in contradistinction, are those which have to be constructed to meet the requirements of special classes of industry, or of new manufacturing processes. Among the former may be mentioned drilling, cutting, milling, and grinding machines; a good illustration of special machines is afforded by the hydraulic diamond-headed filter through which, prior to the discovery of the wire-pulling process. the metal composition used in the manufacture of carbons for electric bulb-lamps was passed.

Universal machines are generally purchased from concerns who deal in them because they are standardized articles; they are the best product of industry at the time they are acquired, and are subject to uniform prices. The value at which they are carried on the books is their original purchase cost as given by invoices, to which may be added freight and cartage, and the cost of installation and adjusting. The cost of subsequent changes and alterations which increase the efficiency or extend the life of the machines, may be capitalized. The credits to the account are for losses due to accidents which impair the usefulness of individual units, either in part or in full, and, at the expiration of the life of the machine, for their depreciated value as contained in the reserve for depreciation, and their residual scrap value.

Special Machines

Special machines are built either by machine shops, in accordance with designs and specifications submitted by the

concern for whose account the construction is undertaken, or by the concern itself. In the former case, the value at which the machine is stated is the contract price; in the latter case it is the cost of material and labor, plus the freight and cartage on the material and a proper proportion of overhead expenses. In either case the cost of the experiments which were conducted before a desirable type was obtained, and the cost of the designs and patterns which were made, may be added to the value of the machine. The cost of all future improvements which make the machine more suitable to the requirements of the concern and increase its efficiency, may be added to the original cost. As to the question of increase of machine life, it is generally more than counterbalanced by the danger of obsolescence which is ever-present in this class of property. If a competitor develops a type which reduces the cost of manufacture, either by bringing about time-economy, or by making possible substantial changes in the process itself, the machine which is not capable of obtaining the same result must be discarded, irrespective of its cost, and a more advantageous one built.

Thus, we have in "special machines" an asset quite different from the asset "universal machines." One is subject to obsolescence, and the other is not; the cost of one is certain and its components are well known; the cost of the other is uncertain, and the proof of the accuracy of its stated value is not readily obtained. Barring accidents, one will be in service for a known number of years; under the same conditions, the extent of the other's useful life is problematic.

Depreciation

Without attempting to go deeply at this point into the subject of depreciation, which will be considered in subsequent chapters, it is evident that the irreparable wear and tear sustained by universal machines, either as a result of manufacturing, or through the mere efflux of the term of

their useful life, is quite different from the possibility of loss through obsolescence which is found in special machines. If, then, the asset which is to be depreciated is composed of the two distinct types, the reserve for depreciation will also contain two kinds of losses, i.e., one which is probable and one which is problematic. It seems, under the conditions, that the purpose of accounting would be better served if the two types of machines were kept separate.

Shop and Hand Tools

The nature of the asset "shop and hand tools" is so different from that of the two elements of machinery and tools already mentioned, that it should under all conditions be stated by itself. The tools contained in this account are sometimes referred to as "small equipment." They comprise saws, files, hammers, screw-drivers, etc., which on account of their fragility, their size, the manifold uses to which they are placed, and the facility with which they can be passed from hand to hand and from bench to bench, cannot be readily or accurately inventoried. They are generally kept under the custody of a storekeeper, and charged to cost of manufacture when issued to the factory. In some cases, they are consigned to the workingmen, and submitted periodically to the inspection of the storekeeper; at this time, the broken and worn-out tools are charged to the cost of manufacture, and the cost of the tools lost is charged to the wages of the careless workmen; in either case, credit is given to the general ledger account containing their value. Whichever way they are treated, they are not subject to depreciation.

CHAPTER XXII

GOOD-WILL, PATENTS, TRADE-MARKS, COPYRIGHTS, FRANCHISES

GOOD-WILL

Definition

One of the most commonly quoted definitions of good-will, so far at least as accountants are concerned, is the one given by Lisle in his book "Accounting in Theory and Practice": "Good-will is the monetary value placed upon the connection and reputation of a mercantile or manufacturing concern, and discounts the value of the turnover of a business in consequence of the probabilities of the old customers continuing."

Another definition is the one appearing in the opinion of Lord Elton in the English case of Crutwell *v.* Lye, which is about one hundred years old: "The good-will which has been the subject of a sale, is nothing more than the probability that the customers will resort to the old place."

Lord Elton's definition gives the impression that good-will is a purely local matter, and that if a concern having acquired the business of another, subsequently transfers it to a different locality, it loses the right to expect that the old customers will continue. This is indeed the stand taken by a Pennsylvania court in the case of Elliot's appeal (60 Pa. St. 161) in which it was held that the good-will of an inn, or tavern, did not exist outside of the premises where the business was conducted at the time of the sale.

Lord Elton's definition has, however, been the subject of

much criticism in and out of American courts, owing to its narrow conception of the valuable asset "good-will." Nor does it seem that English courts have shared his views. Vice-Chancellor, Sir W. Page Wood, says: "Good-will, I apprehend, must mean every advantage * * * that has been acquired by the old firm in carrying on its business, whether connected with the premises in which the business was previously carried on, or with the name of the late firm, or with any other matter carrying with it the benefit of the business."

Personal Character of Good-Will

Purely local as the character of good-will is under certain conditions (as for instance in the case of a hotel whose attractive and convenient location is primarily responsible for the vogue which it enjoys) it may be said to be more commonly personal. If Steinway and Sons were to sell their business and their name to a firm who found it advisable to transfer the plant and the selling agency from New York to Boston, it is certain that the good-will of the musical world would not be affected by the change.

It is precisely that element of personality possessed by good-will which links it so naturally to types of organization in which the names of the supposed proprietors are known, that is to say, sole proprietorships and copartnerships. It is also on this account that the courts have ruled that the good-will of a partnership does not inure to the benefit of the surviving partners, but belongs to the purchaser of the firm name,* and that the good-will of a market stand or stall the lessee of which has died, is independent of the stand itself and belongs to the estate of the deceased.†

Good-will is very frequently referred to as an "intangible asset," that is to say, something the existence of which is spoken of, but is not palpable. Intangible as it may be by

* Slater v. Slater, 175 N. Y. 143 (1903).
† Journe's Succession, 21 La. Ann. 391.

itself, it must nevertheless rest upon something tangible; it is not conceivable, for instance, that a skilled surgeon whose fame is far-reaching could sell the good-will of his practice to an unknown confrére whose skill has yet to be demonstrated. There is nothing tangible in the assurance of the vendor surgeon that his patients will be willing to intrust their lives to his successor. Good-will in this case is non-existent as a marketable value, since it depends upon personal skill which is not to be acquired through purchase. On the other hand, a physician practising without competition in a rural district could in all propriety place a value on the good-will of his practice, provided he were to agree to recommend the purchaser to his patients as fully capable of giving them equally skilled service, and agree to retire, or to move to another state or to another part of the same state. Good-will in this case would rest upon the monopolistic prerogative of the vendee. This is so true that if the vendor subsequently performed an act which would tend to defeat the certainty of monopoly now possessed by the vendee, such, for instance, as announcing the resumption of his practice in the field of his former activities, the courts would invalidate the contract and relieve the aggrieved vendee of his obligations under the contract of sale.*

The Good-Will of Corporations

The nature of the good-will of corporations may be quite different from that of the good-will of sole proprietorships and of copartnerships. When corporations sell their assets it often happens that the identity of the vendor is lost in that of the vendee. In this case the purchaser does not acquire the right to expect that the customers of the vendor will resort to the old place. He acquires the earning power of an established business whose products will sell, no matter who offers them for sale; he figures that, with more up-to-

* Townsend v. Hurst, 37 Missouri 679.

date methods of conducting the business, and through the application of scientific economy, and the union of forces hitherto antagonistic, larger profits will be obtained than were possible before the consolidation of interests took place. For this, he is willing to pay a sum of money which may be far in excess of the properties acquired.

In the absence of a better term, accountants, as well as laymen, are generally satisfied to call this excess price good-will; but the frequency with which the excess of cost over the intrinsic value of the properties acquired is distributed by boards of directors over the value of the individual property units included in the purchase, no mention whatever being made of good-will, indicates that there is some deep-rooted objection to the term, at least from the point of view of corporations.

There are, in fact, any number of instances of consolidations of corporations where the application of the word good-will to the excess price paid by the consolidating interests over the intrinsic value of the properties acquired, would be equivalent to an attempt to mislead, or to an admission of ignorance of the conditions which brought about the combination. The earning power of, say, three corporations to be consolidated may have been reduced to a negligible quantity by the keenness of the competition in which they have engaged. If that earning power were to be used as the basis for the computation of the value of good-will in accordance with the rules which are said to prevail in such cases, there would remain a minus quantity to express the good-will valuation. And, yet, the stockholders of the three competing companies may not feel disposed to combine unless they receive a considerable amount over the intrinsic value of the properties which they control. Thus, so far as earning power is concerned, the bonus paid does not apply to past performances but to confidence in the future. If the word good-will applies to anything, under these conditions,

it must be to that harmony which the consolidation has brought about among forces which up to now were only desirous of destroying one another.

Good-Will as an Asset

It should be said, however, that while any reference to good-will may properly be eliminated from the books of a corporation which absorbs other interests in such a manner as to cause the identity of the vendor to be entirely lost, it should be retained as an asset of a corporation which takes over a copartnership or a sole proprietorship, particularly when the vendee concern retains enough of the name of the vendor to preserve the personal character of the good-will purchased.

The importance of the asset "good-will" when it has been acquired by purchase, cannot be overestimated. There is no other asset of a concern the sale of which would be so effective in bringing operations to an end. In some instances it has been held by courts of law that under the terms of a contract for the sale of good-will, the vendor has no subsequent right to solicit trade in the section of the country in which he previously operated, even among people who were not his customers at the time of the sale.* The sale of good-will may even prevent an individual from using his own name in connection with the line of business in which he has engaged prior to the sale. Judge Bates† quotes a case in which Beatty and Gage formed a partnership whose most valuable asset was a series of copy books, known as "Beatty's Head Line Copy Books." They dissolved, Gage buying out Beatty's interest for $20,000. It was shown that a large part of the price was for the right to sell the copy books. A publishing company, with Beatty's assistance, got out a new series called "Beatty's New and Improved Head Line

* Munsey v. Butterfield, 133 Mass. 492.
† "Law of Partnership"

Copy Books." This was held to be an infringement of Gage's rights, the word Beatty as applied to the books being a valuable asset which passed to Gage.*

Depreciation of Good-Will

Why good-will, having been acquired at a cost which is sometimes considerable, and constituting in some instances the only truly valuable asset of a concern, should be outlawed and sentenced to gradual expulsion from respectable books, is one of the perplexing puzzles which accounting offers to its students. Accountants who would never permit the reduction of a physical asset by the estimated amount of depreciation which it may or may not have suffered during a given period, have no scruples at all when it comes to good-will. Still, it seems that if a concern has paid a large sum to acquire the good-will of another, and has not only retained it but even increased it, there is no apparent reason why so-called conservatism should demand the writing off of the asset to the detriment of the very profits which its purchase gave the right to expect.

One of the reasons frequently advanced in favor of this writing off policy, is that the valuation of good-will, being based on a given number of years' purchase of the average net profits of the vendor concern, less a fair return on capitalization, its cost is consumed concurrently with the efflux of the period for which it has been purchased. This is, indeed, an extreme view. It is unequivocally expressed in Clarence Munro Day's "Accounting Practice": "Good-will is a legitimate asset in an industrial enterprise and the most accepted method of computing the amount of good-will is to take the total profits for the last five years and deduct from them five years' interest on the capitalization at seven per cent per annum; the balance is good-will. The rate of interest is based on the assumption that no capitalist would

* Gage v. Canada Publishing Co., 11 Ont. App. 402.

invest in an enterprise unless he was assured at least seven per cent annual return. Good-will should be written off the books during five subsequent years by charging off one-fifth against each succeeding year."

As opposed to this view, which we have qualified as extreme, the following quotation from Dicksee's "Auditing" may be of interest: "Good-will does not depreciate. On the other hand, it will generally be conceded that it is liable to fluctuations, both continual and extreme * * * As a matter of fact, good-will is not written down because its value is supposed to have become reduced—such a course is all but unknown. The amount at which good-will is stated in a balance sheet is never supposed to represent either its maximum or its minimum value; no one who thought of purchasing a business would be in the least influenced by the amount at which the good-will was stated in the accounts; in short, the amount is absolutely meaningless, except as an indication of what the good-will may have cost in the first instance. Inasmuch, therefore, as nobody can be deceived by its retention, there is no necessity for the amount of good-will account to be written down. On the other hand, the practice is not unusual, where sufficient profits are being made. The question is not, however, one upon which the auditor is required to express an opinion."

Creation of Good-Will

It is generally recognized that the question of the value of good-will does not arise until a sale is contemplated. Thus, it does not seem possible for a concern which has organized otherwise than by purchase of an already established business, to create the asset "good-will" during the course of its operations as a going concern. Still, if it is considered proper to set aside the expenses of organization in an account which will be reduced periodically during the years to which the benefit derived therefrom applies; if further, it

is agreed that corporations have the right to spread the loss incurred through discounts on bonds over the life of the bonds, there does not seem to be a valid objection to the charging of the operating shortcomings of what might be called the "probation period" of a newly established business to an account which would record the cost of obtaining the good-will of the community.

We often hear of concerns which expect to lose money during the first five years of operation, owing to the heavy advertising which they will have to do in order to call the public's attention to the value of their goods. If the cost of such advertising is charged to expense, together with other lavish expenditures which a newly established business is bound to make at the start to win the favor of those whom curiosity first attracts to the establishment, a considerable deficit may be shown. Would it not be better to raise an account with good-will, which would be made to reflect the extraordinary cost of establishing the business, and to distribute that cost over the future periods which are to be benefited thereby?

PATENTS

Nature of Patents

Black's Law Dictionary defines a patent: "A grant made by the Government to an inventor conveying and securing to him the exclusive right to make and sell his invention for a term of years." Thus, a patent is nothing short of a monopoly granted by the State, presumably as an inducement to the inventor to disclose the secret of his invention for the benefit of the public at large. The territory over which the monopoly extends is mentioned in both the letters patent issued to the inventor and in the statute authorizing the issue of patents. United States patents apply to all the states and organized territories, as well as to American ves-

sels on the high seas. They do not, however, apply to foreign vessels in American ports. In certain foreign countries—England, for instance—a patent which has not been operated for four years may be revoked, but in the United States the right of the patentee is not thus affected. In England, the Crown reserves the right to use the patented invention in return for fair compensation; while the United States Government does not reserve that right to itself. However, no injunction can be obtained against the Government, and it is within its power to use the invention by paying therefor reasonable fees to the inventor.

In the United States the term of a mechanical patent is seventeen years from the date of grant; the term of a design patent is three years and one-half, or seven years, or fourteen years, according to the application. In England the patent expires with any foreign patent granted before the English patent; in Canada it expires with any foreign patent granted during its life. In the United States a patent can be extended by special act of Congress.

Treatment of Patents

The value at which the asset "patents" is carried on the books, depends upon whether the concern which owns it is the inventor, or has acquired it from the inventor. In the former case, its value is the cost of conducting the experiments which have led to the invention, and the fees paid in connection with the search as to the validity of the claim for the patent, and with the filing of the claim. In the latter case its value will, of necessity, be what the concern paid for it.

Since patents grant what may be termed a legal monopoly, it is clear that they convey a sort of a title to the goodwill of the community in which the right to exclude everybody except the Government from the use of the invention is exercised. This is why so many corporations which ac-

quire the business of other concerns where a patent is included among the assets, carry the excess price paid over the intrinsic value of the property acquired, under the term "Patents and Good-Will," or merely spread it over the value of the patents.

If the monopoly granted by the patents lasts only for a term of years, it would seem that the asset should be written off during the life of the grant. This can be done in two ways:

1. Credit Patents and debit Profit and Loss with equal instalments corresponding in number to the number of years during which the patent continues to be operative.
2. Credit Patents, or Reserve for Amortization of Patents, and debit one of the components of the cost of goods sold, with periodical amounts representing the probable royalty which would have to be paid on the sales if the patents were operated on a royalty instead of owned. If the reserve account has been created, debit it and credit Patents as soon as the two accounts are equal in amount.

It will be noticed that the second method makes the cost of manufacture bear the loss sustained through the natural extinction of the very asset which made operations possible and created a legal monopoly; further, that it leads to the peculiar conclusion that the income from sales becomes larger as soon as the asset "Patents" has been eliminated. When speaking of the statement of income we shall have occasion to refer again to the oddity of accounting conclusions to which we are led by certain accounting theories and methods.

It should be stated that, instead of being written off, patents have frequently been appraised on the basis of the saving in royalties which their possession affords, precisely

like water-power rights have been appraised on the basis of the saving in fuel and power-producing machinery effected by the use of natural forces.

There exists another theory to the effect that while it is true that patents expire within a certain number of years, the benefit derived from them by the business does not expire concurrently. It is pointed out that the species of monopoly granted by patents is bound to create a considerable amount of good-will, the existence of which is appreciated by would-be competitors, and deters them from engaging in a line of business which has been for so many years the exclusive domain of an established concern. Under this theory, it would be possible to retain the asset value of a patent long after its legal termination, by transferring this value to the Good-will account.

TRADE-MARKS

Definition

A trade-mark is nothing more than a conventional sign which, for commercial purposes, has the same effect as the signature has upon a written document; they both certify to the origin or authorship of the thing to which they are appended.

Trade-marks make it possible for their owners so to earmark their goods as to make them easily recognizable by buyers; in other words, they guarantee that whatever good-will attaches to the product, will be certain to revert to the proper party. In the case of Liedersdorf *v.* Flint,* it was said:

"The court proceeds upon the ground, that the complainant has a valuable interest in the good-will of his trade or business, and that having appropriated to himself a par-

* 15 Fed. Cases 219 (Note 8).

ticular label, or sign, or trade-mark, indicating that the article is manufactured or sold by him or by his authority, or that he carries on his business at a particular place, he is entitled to protection against any other person who pirates upon the good-will of his customers or of the patrons of his trade or business, by sailing under his flag without his authority or consent."

Since an unauthorized use of trade-marks constitutes an infringement of the owner's right to exclusiveness, it may be said of them that they confer a monopoly different from the one obtained under patents, in that its duration is not limited by statute, and can be exercised as long as one desires to use the marks for trade purposes. Thus, the main distinction between patents and trade-marks is that the former need not be used to remain in force, whereas the latter must be used or the owner's exclusive right to them is lost.

While the cost of trade-marks may be insignificant when acquired otherwise than by purchase from former owners, their value may be considerable, because the very success of the goods which they protect means the acquisition of the good-will of the trade to which these goods are offered for sale. If trade-marks have been acquired from another concern their cost may be high, owing to the good-will which they convey. No matter what their cost may be, their influence upon the prosperity of the business is so well defined that they are entitled to a place among the invested values of the enterprise. If kept in force, their value should not be written off. If abandoned, they may be closed by debit to profit and loss, precisely like all other assets which have outlived their usefulness; or they may be written off gradually during a period of years, upon the theory that although given up, they have brought good-will to the business of future years; or again, their original cost may be transferred to the good-will to be written down with that asset, if such is the policy of the concern.

COPYRIGHTS

Definition

Bouvier's Law Dictionary defines copyrights as "the exclusive privilege, secured according to certain legal forms, of printing, or otherwise multiplying, publishing, and vending, copies of certain literary or artistic productions."

In the United States, to be entitled to a copyright one must make application therefor, remitting at the same time the required fee, and cause to be delivered to the Library of Congress two copies of the work.

Like trade-marks and patents, copyrights give a monopoly; but in their case the privileges is limited to a term of twenty-eight years from the time of recording. The term can be extended for twenty-eight years, upon request by the author, his widow, or his children, within one year after the termination of the original grant. This privilege does not extend to the assignee, unless so provided in the contract of assignment.

Copyrights are personal property; as such, they may be willed; in the absence of a will, they descend to the natural heirs.

The nature of the species of monopoly granted by copyrights, consists in the privilege enjoyed by the owner or his assignee or full licensees, to prevent any unauthorized sale of the copyrighted works, and the publication of mutilated parts thereof.

Copyrights as an Asset

The question of the value of the asset "copyrights" is a complicated one. The original cost of obtaining the grant is insignificant unless the value of the time consumed in the preparation of the work be capitalized, together with the expenses incident thereto and with the cost of such preliminary advertising as may have been deemed necessary.

In the case of copyrights which are valuable only to the original grantee, such, for instance, as catalogues, price lists, and advertisements, the cost of plates, etchings, half-tones, etc., may be added to the value of the asset as stated above. But in the case of assignable copyrights, the plates, etchings, and half-tones are so independent of the right itself that they can be sold without giving the purchaser the slightest claim upon the copyright unless so provided in the contract.

The probable value of assignable or salable copyrights depends, to a great extent, upon an estimate of the vogue which they will enjoy; their real value depends upon past performances so far as public favor is concerned, as well as upon an estimate of the continuation of their vogue.

Copyrights, being a monopolistic grant, raise naturally the question of good-will. A copyrighted work may have been a financial failure and yet have obtained an artistic success such as to lift its author and its publishers to a very high plane in the favor of a certain class of readers. If the defects which made it commercially unprofitable can be remedied in future works of the same author, the good-will which the first production has acquired may enhance greatly the commercial success of subsequent copyrights. Hence, the losses sustained by the poor seller might be capitalized under the name of good-will, or added to the value of the copyright, at least until such time as the retroactive effect of subsequent successful works upon the unsuccessful one has been ascertained.

FRANCHISES

Definition

Franchises have been defined as "a branch of the sovereign power of the State, subsisting in a person or in a corporation, by grant from the State." This definition has

been assailed, upon the ground that it fails to establish a proper distinction between "primary franchises" and "secondary franchises."

Primary Franchises

Primary franchises are special privileges, not generally possessed by individuals, which are granted by the State pursuant to a well-defined policy of government or of business control. They include: the right of perpetuity of purpose and of life, which corporations obtain by virtue of their charter; the privilege of limited liability which certain forms of organization receive from the State, as well as all the other special privileges which their legal status conveys, and the rights and prerogatives which all citizens enjoy under existing statutes, or in accordance with the spirit of the common law.

Secondary Franchises

Secondary franchises, at least under the American system of government, originate through a contract made upon valuable consideration, between the sovereign power and individuals or corporations. The consideration for the contract may be monetary, or it may be only the public value of the services to be rendered by the party seeking the grant. They include, in the language of the Supreme Court: "rights and privileges which are essential to the operations of the corporation, and without which its road and works should be of little value; such as the franchise to run cars, to take tolls, to appropriate earth and gravel for the bed of its road or water for its engines, and the like."*

The main distinction between the two classes of franchises, so far as organized business bodies are concerned, is that the former (primary) cannot be alienated, assigned, mortgaged, or otherwise disposed of, while the latter (sec-

* Morgan v. Louisiana, 93 U. S. 217; 23 L. Ed. 860.

ondary) may be, if proper authorization is given by the sovereign power which made the grant.

Generally speaking, secondary franchises are monopolistic and permanent rights "to do an act, or a series of acts of public concern."[1] They constitute a contract between the grantor and the grantee, which cannot be revoked unless the grantor specifically reserves to himself the right of revocation.

The characteristic feature of franchises is that they must be granted by a sovereign power. Under this interpretation of the nature of the grant, it has been claimed that the privileges conferred by the municipalities are not franchises but merely licenses.[2] On the other hand, it has been held that if the grantee of the municipal licenses has given adequate consideration (such as a promise to pay to the municipality a certain proportion of its earnings or of its net profits), the grant ceases to be a license and becomes a franchise which is in the nature of a binding contract and cannot be revoked at the will of the grantor.[3]

The legal doctrine which attempts to establish a difference between the franchises granted by a state and those granted by municipalities, is generally thought to be unsound, upon the ground that municipalities, being state corporations and part of the body politic, are mere subdivisions of the sovereign power. The question as to whether or not the grant of a franchise by a city is an infringement of the right of the state, appears to be one of legal proceedings, and not a question of fact.[4]

Charges Against Franchises

In connection with the components of the book value of the asset "Franchises," when possessed by public service cor-

[1] Southampton *v.* Jessup, 162 N. Y. 122, 126; 56 N. E. 538.
[2] Chicago City R.R. *v.* People, 73 Ill. 541.
[3] Chicago Municipal Gas Light, etc., Co. *v.* Lake, 130 Ill. 42; 22 N. E. 616.
[4] East Cleveland R.R. Co., 6 Ohio Cir. Ct. 318.

porations, the Public Service Commission of the first district of the State of New York has ruled:

"To this account shall be charged 'the amount (exclusive of any tax or annual charge) actually paid to the state or to a political subdivision thereof, as the consideration for the grant of such franchise or right' (Section 55 of the Public Service Commission Law) as is necessary to the conduct of the corporation. If any such franchise is acquired by assignment, the charge to this account in respect thereof must not exceed the amount actually paid therefor by the corporation to its assignor, nor shall it exceed the amount specified in the statute above quoted. Any excess of the amount actually paid by the corporation over the amount specified in the statute, shall be charged to the account 'Other Intangible Street Railway Capital.' If any such franchise has a life of not more than one year after the date when it is placed in service, it shall not be charged to this account but to the appropriate accounts in 'Operating Expenses,' and in 'Prepayments' if extending beyond the fiscal year.

"Payments made to the State or some political subdivision thereof as a consideration for granting an extension for more than one year of the life period of a franchise shall be classed as renewals. Those made as a consideration for franchises or extensions thereof covering additional territory to be operated as a part of an existing system shall be classified as betterments. If the franchises cover separate and distinct new enterprises, the payments therefor shall be classed as original.

"*Note:* Annual or more frequent payments in respect of franchise must not be charged to this account, but to the appropriate tax or operating expense account."

This debars a public service corporation which falls under the commission's supervision, from charging to the

account "Franchise" the cost of obtaining the consent of the property owners, and the cost of the legal expenses incurred in connection with obtaining the grant. Generally speaking, however, such expenses are thought to be properly capitalized under the heading "Franchises," by companies not controlled by the commission, together with the consideration for the contract between the grantor and the grantee, i.e., the amount paid to the state or political subdivision thereof. As to the propriety of capitalizing legal expenses, the question remains an open one; some accountants claim that such capitalization is faulty whenever the company which is the beneficiary of a franchise, has a permanent legal department as part of its administrative organization.

Any other cost incident to, or necessary for, the enjoyment of the franchise, such, for instance, as the cost of paving between tracks, may be capitalized in some other property account, such as Paving, Track and Roadway, etc.

The payment to a municipality of a portion of the earnings from operations, in accordance with the terms of a franchise grant, is considered as a burden of the asset and cannot enter into its valuation.

CHAPTER XXIII

INVESTMENTS

Surplus Capital

That part of the capital of a business which is not required for the operation of the enterprise, may be invested outside the business in such a manner as to provide an income at least equivalent to the returns which a private individual may expect to receive from his wealth through ordinary investment channels; also, profits which have come in the business and are not needed for additions and betterments, for extension of the field of operations, or for distribution to the interested parties, may be similarly used. This is done in order to obtain an income through sources which the legitimate pursuits of the enterprise do not afford. Finally, all available funds of the concern, whether capital or the result of operations, may be invested for the production of the income necessary to fulfill the purpose for which the concern was organized.

Speculative Investments

Investments may be temporary or permanent in nature. If temporary, they may have an undercurrent of speculation which should not be present in permanent investments. A business concern having unemployed funds, may afford to invest in securities selling below their acknowledged or supposed worth, hold them until market conditions improve, and sell them in order that the profits may be realized. But a life insurance company, whose duty it is to obtain for the

present and secure for the future an income of such magnitude that it will not only exceed the cost of conducting the enterprise and provide for such losses as may be incurred, but provide as well for the largest possible refunds of premiums to the policy holders in the form of dividends, cannot afford to buy securities the fluctuations of which may be due to the uncertainty of the income to be derived from them, or to the problematic character of their value in the event of the dissolution of the companies issuing them.

Temporary investments may include, among other things, securities owned, securities purchased on margin, and goods purchased owing to unusually favorable market conditions and held either to be used by the concern itself, if conditions make it advisable, or to be sold if prices rise to a figure which will guarantee a larger profit than could be had if the goods were to be used by the concern.

Securities purchased for speculative purposes should be carried on the books at their original cost, that is to say, at their market value on the day of the purchase, plus fees required by law or custom, and charges for services rendered by the agents who attended to the purchase. When purchased on margin, they should be carried at cost, that is to say, market value on the day of purchase, plus charges incident thereto, plus subsequent charges made by brokers for interest on the proportion of the cost which the margin does not offset, less, if such accrue, any dividends or interest collected by the broker for the account of the legal owner of the securities. To offset the excess of the original cost over the amount of the margin and the subsequent additions to, and deductions from, that excess, the account with the broker is credited or debited, as the case may be. The account is also debited with all payments made to the broker subsequent to the purchase. Thus, the equity of the speculator is represented by the difference between the asset and liability accounts.

The theory which holds that securities carried for speculative purposes should be stated at cost, is often objected to on the ground that, since speculation is involved, it is well to make the Investments account reflect the fluctuations of the market. It cannot be forgotten, however, that nothing which has not been sold can bring profits, and that the Profit and Loss account is not intended to reflect what the profits or the losses would be if certain transactions had taken place, but what they are as a result of the transactions which have taken place.

Goods acquired for speculation should be carried at cost of purchase, plus charges for brokerage, cartage, storage, etc., and plus the subsequent cost of holding them.

Permanent Investments

The word "permanent" when applied to investments, does not mean that the funds are invested forever in one particular thing, but that if the sum which has been invested is returned at the expiration of the term of the investment, it will be reinvested at once, or as soon as may conveniently be done. Permanent investments may be divided as follows:

1. Loans Secured by Bonds and Mortgages
2. Loans Secured by Collateral
    a. Time Loans
    b. Call Loans
3. Investments in Bonds of Other Companies
4. Investments in Stocks of Other Companies
5. Investments in Real Estate

1. Loans Secured by Bonds and Mortgages

The account representing this type of investments is frequently found under the name "Mortgages Receivable." In connection with the word "mortgage," as usually employed, F. A. Cleveland says in "Funds and Their Uses":

"That which commonly goes in the security market as

'mortgage,' is a misnomer; it is in reality a credit obligation secured by a mortgage * * * in fact, if one held only the 'mortgage' or security contract, it would be of little value. The promise for the delivery of money is found in a 'promissory note' or other evidence of debt. The mortgage is only a collateral contract which gives to the creditor a contract of lien on the property named as security for the payment of the contract of credit."

The Mortgage Contract

The indenture pledging property to secure the loan received by the mortgagor may, or may not, mention the right of the mortgagee to pay delinquent taxes on the property pledged, or such assessments levied on the property as the mortgagor may fail to pay, or fire insurance premiums which he is in duty bound to pay and has not paid; nevertheless, the mortgagee has that right, and such payments made by him will be presumed to be for the benefit or protection of the pledge. The payments thus made will be added to the principal of the loan, and be covered by the pledge, precisely as if they had been part of the original sum loaned. This applies also to the necessary expenses of the mortgagee in connection with foreclosure proceedings. By necessary expenses is meant disbursements which cannot be construed as being incurred merely for the benefit and protection of the mortgagee. It has been held by courts of law that in the absence of stipulations in the pledge to the effect that the mortgagor is to bear cost, the recording fees cannot be charged against him.* This is due to the fact that the recording of a mortgage is principally for the protection of the mortgagee, since, while an unrecorded mortgage is valid as between the contracting parties, it is invalid as against innocent third parties.

To insure the permanency of this kind of investment,

* Simon v. Sewell, 64 Ala. 241.

the mortgagee has been given the right to refuse repayment of the sum loaned until the date mentioned in the promissory note. To secure the recovery by the loaner of the principal sum loaned, of the advances made by him for the protection of the property pledged, and of the interest accrued thereunder, the states of the Union have enacted statutes concerning the steps which the mortgagee must take to enter the premises or to satisfy his claim through foreclosure proceedings.

Mortgage Interest

In regard to the income from mortgage loans, it should be noted that it does not accrue from the date of the mortgage, but from the date at which the money was paid to the mortgagor; that if no rate of interest is mentioned, the legal rate prevails; that if, peradventure, the bond or promissory note does not mention interest, while the mortgage does, interest will be allowed at the legal rate; that interest after the maturity of the obligation and default thereon, is chargeable to the mortgagor if the instrument so stipulates or if it carries interest "until paid."

The amount which will be loaned on bonds and mortgages depends generally upon the margin considered to be safe. Some concerns will loan on first mortgages as much as 80% of the appraised value of the property to be pledged while others will loan only 60%. In the first instance the margin would be stated as 20%; in the second, at 40%.

Accounting Procedure and the Mortgage Register

Accounting for this class of investments presents no difficulty so far as the general ledger is concerned, since it consists merely in recording the amount loaned, the advances made for the account of the mortgagor, either at the time of the loan or subsequently, and the amount collected at maturity of the investment. But a subsidiary book which

will give all the information that may be required, is a more complex matter. For each individual mortgage there must be known, besides the name of the mortgagor and the amount of the loan: the date when the mortgage was given and its maturity; the location and the general description of the premises mortgaged; the state and county, and the book and page, in which the mortgage was recorded; the interest rate and date; the number, the term, the amount, and the expiration of the policy of fire insurance which protects the buildings, the amount of the premium paid, the name of the company in which the property is insured, and the name of the party who is to pay the premiums; the appraised value of the land and of the buildings; the amount of principal repaid if the mortgage provides for gradual extinction, and the amount of interest accrued and due, as well as the amount paid.

Figure 38 will show how the information required may be conveniently condensed without detracting from the lucidity of the record. Any other data which may be needed in regard to possible assignments of the mortgage, may be inserted on the left side of the folio.

The Nature of Security

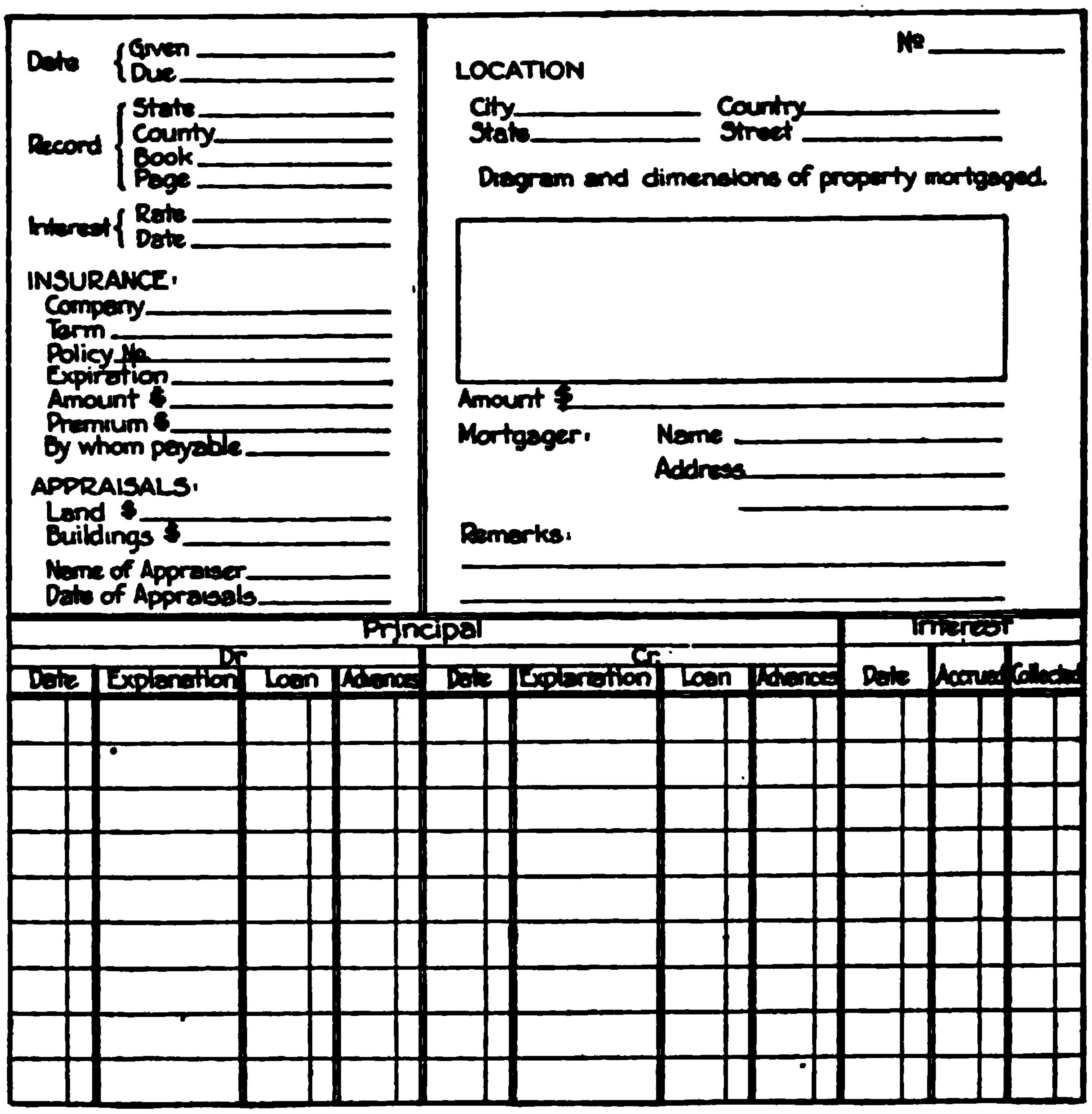
"When a debtor delivers to his creditor an evidence of indebtedness with the intention that it become additional security for his personal existing obligation, it becomes merely concurrent security, and is only designed to increase the means of the creditor to realize the principal debt which it is given to secure."*

"There are three kinds of security: the first, a simple lien; the second, a mortgage, passing the property out and out; the third, a security intermediate between a lien and a mortgage, viz., a pledge."† The holder of a lien has no

* Osborne v. Stringham, 44 S. D. 593, 598; 57 N. W. 776.
† Halliday v. Holgate, L. R. 3 Exch. 299, 302.

right to sell the property which he holds as security; he must be content to retain it until his claim is satisfied.

"A mortgage is but a conveyance with a clause of defeasance; it is something more than a lien; it is the grant of an estate as specific security for the money loaned."* The holder of a pledge has no title of any kind to the thing


Date {Given ______ Due ______
Record {State ______ County ______ Book ______ Page ______
Interest {Rate ______ Date ______
INSURANCE:
Company ______
Term ______
Policy No. ______
Expiration ______
Amount $ ______
Premium $ ______
By whom payable ______
APPRAISALS:
Land $ ______
Buildings $ ______
Name of Appraiser ______
Date of Appraisals ______
No. ______
LOCATION
City ______ Country ______
State ______ Street ______
Diagram and dimensions of property mortgaged.
Amount $ ______
Mortgager: Name ______
Address ______
Remarks:

Principal								Interest		
Dr				Cr						
Date	Explanation	Loan	Advances	Date	Explanation	Loan	Advances	Date	Accrued	Collected

Figure 38. Subsidiary Ledger for Secured Loans

pledged, but has an implied right to sell it on the day of the default of the pledgor. "The authorities show that the difference between a pledge or pawn of personal chattels and a mortgage of them is, that a mortgage passes the whole legal interest and property from the mortgagor to the

* Dateman's Appeal, 127 Pa. St. 348; 17 Atl. 1086, 1100.

mortgagee, and possession by the mortgagee is not essential to create his title, and, generally speaking, is inconsistent with such a title, while a pledge transfers only personal property in the thing pledged, the general property continuing in the pledgor. The pledgee's right is not complete until he has obtained possession, and his right or special property is to hold the pledge as security for the debt or engagement of the pledgor, and on default on the day appointed for payment or performance, to sell the pledge. Securities for money and negotiable instruments may be given in pledge, and the addition, as there is in the agreement here, of an express power to sell on default, will not change what would have been a pledge into a mortgage."*

The foregoing describes fully the nature of the asset "loans on collateral," and differentiates between investments in which the title to the security pledged is in the loaner, although it carries a defeasance clause, and the investments in which the title to the pledge remains in the pledgor.

2. Loans Secured by Collateral

Time loans are made for a specified period of time, and cannot be repaid before maturity without the consent of the loaner; that consent may be given without consideration, or in consideration of the payment of a "bonus" calculated on the basis of equated time.

Call loans are not made for any specific period, and are repayable at the option of the beneficiary or upon the demand of the loaner.

The securities pledged under either class of loans may consist of bonds or stocks, or both, or even of goods deposited in a warehouse, as evidenced by the pledge of the storage receipt. The pledge is, in any case, of a market value superior to the loan made thereunder. The amount of the margin depends upon the policy of the loaner as to

* Dateman's Appeal, 127 Pa. St. 348; 17 Atl. 1086, 1100.

what he considers safe. It is understood between the contracting parties that the securities pledged may be withdrawn at any time by the party who has title to them, and replaced by others equally acceptable to the pledgor. It is also understood that if the market value of the pledge falls below the margin represented by the difference between the

No.________

Name________ Terms:
Address________

Amount: Dates:
Loan $________ Loan________
Margin ________% Maturity________
Interest rate ________% Interest ________
Remarks:

Date	Description	Quantity	Market Value	Total Value	Date	Desription	Quantity	Market Value	Total Value

Figure 39. Record of Collateral Pledged for Loans

market value of the original securities on the day of the loan, and the amount loaned, the pledgee may call upon the pledgor for additional security sufficient to make up the difference, or, if it is a call loan, for additional security or for repayment. In case of default the pledgee may sell the securities, apply the proceeds to liquidate the indebtedness

of the pledgor, and, if any excess remains, return this to the pledgor.

The method of keeping account of the collateral pledged under either time or call loans, is illustrated by Figure 39. Exchanges of securities are recorded by merely crossing off the particular items which have been removed, and entering under the proper date the securities which have taken their place.

3. Investments in Bonds of Other Companies

The accounting treatment here depends absolutely upon the purpose of the investment.

If an "investment house" buys bonds, it is for the purpose of holding them until such time as they can be disposed of advantageously among customers of the house, or, if more profitable, resold in the open market. The only question at issue in either case is one of profit, and it is evident that, since par value is purchased and sold, with a variation in the amount of discount gained or premium suffered, the one important thing from the theoretical standpoint is to determine precisely that variation.

Hence, so far as the general ledger is concerned, an account with the par, and one with the premiums and discounts for every class of bonds acquired, will satisfy the requirements. The account with par is merely an inventory account reflecting at all times the unsold portion of the principal; the account with premiums and discounts is a complex account which, in order to show profits and losses, requires the application of the inventory of that part of the net amount of the account which applies to the principal unsold.

The Interest Account

Premiums and discounts must be carefully distinguished from the interest purchased, if any. Interest which has ac-

crued on the bonds at the time of their purchase is under no conditions to be considered as part of the cost of the investment. It must be evident to the student of accounting that the amount paid for interest accrued on bonds acquired does not represent either principal or income of the purchaser. It merely expresses the amount of the earnings of the vendor which the vendee will receive on the first interest date and must refund to the vendor in anticipation; or if the bonds are acquired from the company responsible for their issue, it represents only that part of the interest receivable at the first interest date, which the purchaser has not earned and which the issuing company has not incurred. As a consequence, interest accrued on bonds acquired, no matter what the purpose of the investment may be, is nothing more than interest purchased, for which a special account must be raised. This account will be closed, at the first interest date, by crediting to it that part of the interest receipts which was earned by the bonds before they were purchased, and which formed part of the purchase price. It is evident that this account does not reflect either a gain or a loss.

The interest received on bonds by an investment house is, of necessity, income on the capital invested, and should under no conditions be considered as reduction of the cost of the investment.

If a business concern buys bonds as temporary producers of income, the only logical way of treating the account is to express the bonds at cost. The question of amortization or of accumulation of cost to par cannot arise in this particular case, since it never was intended to hold the bonds until maturity. The receipts of interest will send to the earning account "Interest on Bonds," an amount which will bear the rate of income which the concern expected on the cost shown by the bond account. When the securities are sold, the account with principal will reflect the profit or the loss made on the sale of the ledger asset.

Relation of Cost to Income

If, in accordance with the purpose for which it was created, a concern purchases long-term investments in order that the rate of income which they produce may be guaranteed for an extended future, then, and then only, does the accountant face the question of amortization of that part of the cost which will not be repaid to the purchaser at maturity, or the question of accumulation of that excess of par over cost which will be received at maturity of the investment.

This class of investment cannot be recorded otherwise than at the cost at the time of acquisition. By cost is meant only par plus premium or less discount, as the case may be, and, for reasons which will become obvious as soon as the theory of amortization has been expressed, cannot be made to contain interest purchased, brokerage, stamp tax, etc., etc.

If the value of the asset is stated at cost, and cost is less than par, it is evident that at maturity of the investment, the amount of the principal received being credited to the asset account, the credit will exceed the debit, unless in the interim steps have been taken to accumulate cost to par. Conversely, if cost is greater than par, and at maturity of the investment the amount of principal received is credited to the asset account, the debit will exceed the credit, unless in the interim steps have been taken to amortize the portion of cost in excess of par value.

Now, since bonds assure to their holders an interest annuity during the life of the instruments of credit, and a reversion of principal at maturity, if a bond with a nominal return of, say, 5% has been acquired at a price to produce 4%, and another bond with a nominal return of 4% has been acquired at a price to produce 5%, it is plain that in the first instance the cash interest income received on the par reversion value has been greater than the expected income

on the outlay, while in the second instance it has been smaller. Submitting these facts to rigid analysis, we see that the excess of cash income produced by bonds acquired at a premium, represents in reality a periodical return of cost over par, that is to say, a reduction of cost, and that the excess of effective income produced by bonds acquired at a discount represents in reality a periodical accretion of cost to par.

Proceeding further, if 5% on par has been received in cash as interest on a bond acquired at a price which would produce 4% on cost, the income on the investment will not be accurately stated until the earning account to which the cash return has been credited, is relieved of the difference. And if 3% on par has been received in cash as interest on a bond acquired at a price which would produce 4% on cost, the income on the investment will not be accurately stated until the earning account to which the cash return has been credited is increased by the difference.

What that difference will be found to be in either case, depends upon whether we are satisfied with near-accuracy, or only with absolute accuracy. In the first instance, it will be sufficient to divide the total premium or the discount into as many equal units as there are interest periods during the remainder of the life of the bonds. In the second instance we shall have to compute the exact income on the book value of the investment as it stood at the beginning of each successive period, deduct that amount from the interest received, and apply the difference as a reduction from, or as an addition to, the cost.

The following examples will serve to illustrate the different results obtained under the two methods of treatment. In Example A the premium has been amortized in equal amounts during the life of the bonds, extending from the date on which they were purchased to the date of their maturity.

Example A

Investment

5% Bonds of the Millstone Co., payable May 1, 1914. Interest payable May and November 1. Acquired to produce 4%. Par, $50,000.00.

Date	Interest on Investment			Principal			Remarks
	Nominal Return	Periodical Amortization	Income	Dr.	Cr.	Balance	
May 1, 1909	....	....	....	$52,245.64	....	....	Cash
Nov. 1, 1909	$1,250.00	$224.57	$1,025.43	....	$224.57	$52,021.07	Interest
May 1, 1910	1,250.00	224.56	1,025.44	....	224.56	51,796.51	"
Nov. 1, 1910	1,250.00	224.57	1,025.43	....	224.57	51,571.94	"
May 1, 1911	1,250.00	224.56	1,025.44	....	224.56	51,347.38	"
Nov. 1, 1911	1,250.00	224.56	1,025.44	....	224.56	51,122.82	"
May 1, 1912	1,250.00	224.57	1,025.43	....	224.57	50,888.25	"
Nov. 1, 1912	1,250.00	224.56	1,025.44	....	224.56	50,673.69	"
May 1, 1913	1,250.00	224.56	1,025.44	....	224.56	50,449.13	"
Nov. 1, 1913	1,250.00	224.57	1,025.43	....	224.57	50,224.56	"
May 1, 1914	1,250.00	224.56	1,025.44	....	224.56	50,000.00	"
	....	....	....	....	50,000.00	....	Cash
	$12,500.00	$2,245.64	$10,254.36	$52,245.64	$52,245.64		

In Example B which follows, the premium has been amortized in accordance with the theory of the accountancy of investments.

Example B

Investment

5% Bonds of the Millstone Co., payable May 1, 1914. Interest payable May and November 1. Acquired to produce 4%. Par, $50,000.00.

Date	Interest			Principal			Remarks
	Nominal 5% on Par	Effective 4% on Cost	Amortization of Cost to Par	Dr.	Cr.	Balance	
May 1, 1909	....	....	....	$52,245.64	....	....	Cash
Nov. 1, 1909	$1,250.00	$1,044.91	$205.09	....	$205.09	$52,040.55	Interest
May 1, 1910	1,250.00	1,040.81	209.19	....	209.19	51,831.36	"
Nov. 1, 1910	1,250.00	1,036.63	213.37	....	213.37	51,617.99	"
May 1, 1911	1,250.00	1,032.36	217.64	....	217.64	51,400.35	"
Nov. 1, 1911	1,250.00	1,028 01	221.99	....	221.99	51,178.36	"
May 1, 1912	1,250.00	1,023.57	226.43	....	226.43	50,951.93	"
Nov. 1, 1912	1,250.00	1,019.04	230.96	....	230.96	50,720.97	"
May 1, 1913	1,250.00	1,014.41	235.59	....	235.59	50,485.38	"
Nov. 1, 1913	1,250.00	1,009.71	240.29	....	240.29	50,245.09	"
May 1, 1914	1,250.00	1,004.91	245.09	....	245.09	50,000.00	"
	....	....	....	....	50,000.00	....	Cash
	$12,500.00	$10,254 36	$2,245.64	$52,245.64	$52,245.64		

When the figures given in Example B are analyzed carefully, it is seen that the periodical amortization result represents a uniform amount of $205.09 (which is the difference between the nominal cash interest received, and the effective amount expected as income) set aside at every interest date, together with interest at 2% semiannually (4% annually) earned by the amounts previously set aside, and deducted from the cost of the investment at the end of the period.

Hence, the theory of amortization of premiums on bonds bearing interest semiannually, rests upon the assumption that the amount of cash representing the difference between the nominal and the effective rate at the time of the first receipt of interest, is deposited twice a year at compound interest, in order that at maturity of the investment a fund equal to the premium may be obtained.

To prove whether or not this is true, let us assume that, instead of periodically reducing the cost of the bonds, we allow the original cost to remain undisturbed until maturity, and that we deposit twice a year in a special fund earning compound interest at 2% semiannually, the amount of cash received for interest on the par value in excess of the expected income. We then obtain the table given on the following page, which reflects faithfully the entries made in the ledger accounts which will be affected by the transactions.

The illustration given is all the more interesting because it shows that the net result of the cash transactions incident to the purchase, the interest earnings, and the sale of the investment from May 1, 1909, to May 1, 1914, has been to increase the wealth of the investor, as represented by cash, in the amount of $10,449.10, which is precisely the amount which he expected his investment to produce in five years.

EXAMPLE C

			Fund for Extinguishment of Premium on Investments		Interest on Investments		Accumulation for Extinguishment of Premium on Investments		Investment in Bonds of Other Companies	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
May 1, 1909		$52,245.64							$52,245.64	
Nov. 1, 1909	$1,250.00	205.09	$205.09		$205.09	$1,250.00		$205.09		
April 30, 1910			4.10					4.10		
May 1, 1910	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
Oct. 30, 1910			8.29					8.29		
Nov. 1, 1910	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
April 30, 1911			12.55					12.55		
May 1, 1911	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
Oct. 30, 1911			16.90					16.90		
Nov. 1, 1911	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
April 30, 1912			21.34					21.34		
May 1, 1912	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
Oct. 30, 1912			25.87					25.87		
Nov. 1, 1912	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
April 30, 1913			30.49					30.49		
May 1, 1913	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
Oct. 30, 1913			35.20					35.20		
Nov. 1, 1913	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
April 30, 1914			40.00					40.00		
May 1, 1914	1,250.00	205.09	205.09		205.09	1,250.00		205.09		
"	50,000.00									$2,245.64
"	2,245.64			$2,245.64			$2,245.64			50,000.00
	$64,745.64	$54,296.54	$2,245.64	$2,245.64	$2,050.90	$12,500.00	$2,245.64	$2,245.64	$52,245.64	$52,245.64
	54,296.54					2,050.90				
	$10,449.10					$10,449.10				

On the other hand, an analysis of the cost transactions reflected by Examples "A" and "B," that is to say, the "nearly accurate" and the "absolutely accurate" methods, shows:

Cash Disbursements:		
May 1, 1909		
Paid for investment in bonds		$52,245.64
Cash Receipts:		
Nov. 1, 1909, to May 1, 1914		
Received for interest......	$12,500.00	
May 1, 1914		
Received—Par value of bonds	50,000.00	62,500.00
Net increase of cash as a result of the investment, as corroborated by the income accounts from Nov. 1, 1909, to May 1, 1914		$10,254.36

So far as cash is concerned, the difference between the two sets of results, is nothing more than the interest earned by the premium redemption fund created under Example C, i.e., $194.74. As to the difference in the income, it is due to the fact that, in Example B, the interest supposedly earned by the amount of $205.09 is deducted from an asset, while in Example C it is added to an asset. Principles of accounting state that if an asset is deducted from another, the income which originates from the asset thus deducted, is compensated by the decrease of the other asset, while, if the asset arising from the receipt of income is recorded, the income must also be shown.

We will use the same examples in connection with discounts.

In Example D the discount has been accumulated in equal amounts during the life of the bonds.

EXAMPLE D

3% Bonds of the Millstone Co., payable May 1, 1914. Interest payable May and November 1. Acquired to produce 4%. Par, $50,000.00.

The phase of the theory of accounts known as "accountancy of investments" is much more readily understood by the student when applied to premiums than when applied to discounts. And yet, the accounting principle is the same and is equally plain from either point of view. On the one hand, the periodical recovery, under the outward appearance of "income," of the portion of the "cost" of the asset "investments" which exceeds "par," necessitates the periodical reduction of the asset and of the income. On the other hand, the periodically increasing value of the asset in its evolution from "cost" to "par," can only be expressed by a corresponding increase of income.

In Example E the discounts have been accumulated scientifically.

Example E

3% Bonds of the Millstone Co., payable May 1, 1914. Interest payable May and November 1. Acquired to produce 4%. Par, $50,000.00.

Date	Interest			Principal			Remarks
	Nominal 3% on Par	Effective 4% on Cost	Accumulation to Par	Dr.	Cr.	Balance	
May 1, 1909	....	....	....	$47,754.36	....	....	Cash
Nov. 1, 1909	$750.00	$955.09	$205.09	205.09	....	$47,959.45	Interest
May 1, 1910	750.00	959.19	209.19	209.19	....	48,168.64	"
Nov. 1, 1910	750.00	963.37	213.37	213.37	....	48,382.01	"
May 1, 1911	750.00	967.64	217.64	217.64	....	48,599.65	"
Nov. 1, 1911	750.00	971.99	221.99	221.99	....	48,821.64	"
May 1, 1912	750.00	976.43	226.43	226.43	....	49,048.07	"
Nov. 1, 1912	750.00	980.96	230.96	230.96	....	49,279.03	"
May 1, 1913	750.00	985.59	235.59	235.59	....	49,514.62	"
Nov. 1, 1913	750.00	990.29	240.29	240.29	....	49,754.91	"
May 1, 1914	750.00	995.09	245.09	245.09	$50,000.00	....	Cash
	$7,500.00	$9,745.64	$2,245.64	$50,000.00	$50,000.00		

Enough has been said on the subject of premiums and discounts to show that the differences developed by the sundry methods of treating discounts and premiums are not very important, in so far at least as small investors are concerned.

As to large investors, it would seem that their policy being to invest in such a manner as to obtain a stated rate of income, nothing will satisfy their requirements but the method which will make the income account reflect the effective (or expected) rate of income which they receive.

Courts of law are not unlikely to frown at scientific methods of amortizing or accumulating bonds to par in connection with the interests of life-tenants and remaindermen. The following quotation from the Cyclopædia of Law and Procedure will point out how divergent opinions are in respect to premiums and discounts:

"It is very generally held that if a testator leaves bonds which he owns to trustees, with direction or

authority to hold the same, paying the interest to certain persons for life, with remainder over, the fact that such bonds are worth a premium at and after his death, will not warrant the trustees in retaining any portion of the interest for the benefit of the remaindermen.[1] But in the case of bonds purchased at a premium by the trustees after the testator's death, the cases are in hopeless conflict. In some states it is held that such premiums are to be charged to principal, and not to income, and a trustee is not justified in withholding a part of the income to meet a diminution of principal which may not ever take place.[2] In other states the rule is laid down that where trust funds are invested in bonds running for a term of years and purchased at a premium, in the absence of a clear direction in the will to the contrary, such a proportionate deduction should be made from the nominal interest as will, at the maturity of the bonds, make good the premium paid, and preserve the principal of the fund intact at maturity. This is called the sinking fund rule.[3]"

Investment Accounting

A great deal has been said about the difficulty of the theory of the accountancy of investments. Still, if the principle is understood, nothing is simpler than to amortize bonds when the cost, the nominal rate on par, the effective rate on cost, the interest periods, and the life of the securities are known.

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[1] Connecticut Trust, etc., Co.'s Appeal, 80 Conn. 540; 69 Atl. 360; Show *v.* Cordis, 143 Mass. 443; 9 N. E. 794; Hemenway *v.* Hemenway, 134 Mass. 446; etc.

[2] Hite *v.* Hite, 193 Ky. 257; 20 S. W. 778; 14 Ky. L. Rep. 385; 40 Am. St. Rep. 189; 19 L. R. A. 173; *In re* Penn Gaskell, 208 Pa. St. Super. Ct. 526, holding further that a direction in a will that "the net income of certain funds is to be paid to the life-tenant," does not permit any deduction from such income to provide for the possibility of loss by the principal on account of premiums paid for investments; *In re* Furney, 12 Phila. Pa. 130.

[3] Connecticut—Curtis *v.* Osborn, 79 Conn. 555; 65 Atl. 968; Massachusetts—New England Trust Co. *v.* Eaton, 140 Mass. 532; 4 N. E. 69; 54 Am. Rep. 493; New Jersey—Ballantine *v.* Young, 74, N. J. Eq. 572; 70 Atl. 668; New York—*In re* Stevens, 187 N. Y. 471; 80 N. E. 358 (modifying 111 N. Y. App. D. 773; 98 N. Y. Suppl. 28); etc.; other cases quoted. But see matter of N. Y. L. Ins., etc., Co., 24 Misc. 71, holding that the loss or gain in the value of securities purchased by a trustee, in the exercise of his sound discretion, should go to the diminution or accretion, as the case may be, of the capital, and not of the income, unless a contrary intention must be implied from the trust instrument.

As to accounting problems based on this subject, which C. P. A. candidates are asked to solve at examinations, they uniformly state the par value of the bonds acquired, the nominal rate, the effective rate, the interest periods, and the life of the bonds, and require the finding of the cost. No candidate should fail to meet the test if he really understands the theory of amortization. He requires no algebraic formulæ, and no more advanced knowledge of mathematics than familiarity with division, subtraction, and addition.

Considering the meaning of the transactions which will take place at the maturity of the securities, he will see at once that there will be received by the investor:

1. The par value of his investment.
2. The last instalment of the premium annuity repayable in as many periods as the bonds have to live between the date of the purchase and that of the maturity.
3. The effective (or expected) rate on cost.

Items 2 and 3 are included in the receipt of the nominal rate on par receivable at the same time as the principal.

Adding the proceeds of principal at the end of the last period, to the proceeds of interest received at maturity, at the nominal rate, a sum is obtained which is composed of the whole cost (i.e., 100%) at the beginning of the said last period, plus the effective interest on cost.

Dividing the sum of the cost of the principal at the end of a period, inflated by the nominal interest return, by 100, plus the effective interest rate for the period, will give the cost at the beginning of the prior period.

Example: One hundred bonds of the M. K. T. Co. were acquired on January 1, 1913; they are due June 30, 1914, and bear interest at 5%, January and July. They were acquired to produce 3%. Required, cost of bonds.

Investment

M. K. T. Bonds, payable June 30, 1914.
Interest at 5%, payable January and July.
Acquired January 1, 1913. Par value, $100,000.

	Nominal Interest 5%	Effective Interest 3%	Amortization	Dr.	Cr.	Balance
End of last period—June 30, 1914	$2,500.00	$1,514.78	$985.22		$100,000.00 985.22	
Beginning of last period—Jan. 1, 1914						$100,985.22
End of second period—Dec. 31, 1913	2,500.00	1,529.29	970.71		970.71	
Beginning of second period—July 1, 1913						101,955.93
End of first period—June 30, 1913	2,500.00	1,543.66	956.34		956.34	
Beginning of first period—Jan. 1, 1913—Cost				$102,912.27		
	$7,500.00	$4,587.73	$2,912.27	$102,912.27	$102,912.27	

It will be noticed that the example shows the periods in their reverse order.

Besides the methods suggested above for recording the investment in bonds in accordance with the very purpose of the investment, there is another which is adopted by all concerns which wish to make their investments reflect market values. It is as follows:

As to Principal. Having stated the investments at cost, adjust them to the market value at the end of every period, debiting or crediting the difference to profit and loss. No premiums or discounts are considered.

As to Income. Take it at the nominal rate of the bonds, and make no adjustment whatever.

It may be said of the foregoing that while this method is not objectionable in the case of speculative investments, it should be obnoxious to the very purpose of permanent investments, since they are made for income, and not for speculative profit.

The question of discounts and premiums suffered or received by corporations through the issue of certificates of indebtedness will be taken up in subsequent chapters.

4. Investments in Stocks of Other Companies

Whether the reason for making the investment has been to obtain income, to control competing interests, or otherwise, permanent investments in stocks of other companies should be carried at cost.

In so far at least as the investor is concerned, the question of discounts and premiums never arises in connection with capital stock. A certificate of stock conveys no promise, expressed or implied, that a certain sum of money will be paid to the holder at any time. Generally speaking, whatever is received on account of stocks is income, and is commonly referred to as "dividends on

stocks." It must be said, however, that dividends received on the stock of mining companies which do not set aside a certain proportion of their earnings to take care of the exhaustion of ore-bearing veins concurrently with operations, carry a certain return of the original investment. It is seldom possible to estimate what that amount is, as it is not a positive and well-known quantity, like the difference between par and cost as in the case of bonds, but depends not only upon the accuracy of the estimate of ore which the veins will produce, but also upon the value of the other assets of the company when operations cease because this ore is exhausted. Hence, it is very difficult to set aside out of dividends, an amount which will truly offset, at the winding up of the company, the amount originally invested. The same thing is true of land improvement companies, and of similar enterprises where the capital assets waste concurrently with the progress of the business.

The temptation to adjust the book value of investments to their market value is admittedly greater in connection with stocks than with bonds, because the fluctuations of stocks are greater and more frequent than is the case with bonds. Still, the principles which apply to one class of securities apply also to the other. It is quite evident that before the New York State Insurance Department restricted the investments in stocks which life insurance companies were in the habit of making, unfavorable conditions in the securities market at the end of a fiscal period would have had a considerable effect upon the dividends to policyholders paid by a company whose custom it was to adjust its investments periodically upon the basis of market values. Assuming that at the end of the year 1912 a "paper loss" of $20,000,000 had been sustained owing to panicky conditions, and that one year later a "paper gain" of an equal amount had been realized,

due to an unusually optimistic feeling prevalent in Wall Street, the financial status of the company at December 31, 1912, would not have depressed the directors of the company any more than the financial status at December 31, 1913, would have elated them. Their investments being made supposedly with a view to permanency, the fact that the value of their securities was boosted by "bulls" or dragged down by "bears" would not have affected them in the least, for in neither case was there any necessity of selling the investments. As a matter of fact, however high the value of the securities might have soared, the sudden appearance on the market of a considerable block of stocks offered for sale by life insurance companies would very probably have had the immediate effect of lowering prices.

But leaving aside the natural indifference of the company to "paper losses" and "paper gains" on market values, let us consider the case of two holders of "tontine" policies of equal amount, maturing, one at December 31, 1912, and the other at December 31, 1913. It is quite obvious that the year 1912 having sustained a supposed loss of $20,000,000, the dividends received by the holder of the policy maturing in that year would have been disproportionate to those received in the subsequent year by a similar policy whose good fortune it was to mature at a time when the "bulls" were the masters of the situation in Wall Street.

5. Investments in Real Estate

In connection with investments in real estate, whether made by direct purchase, or as a result of the foreclosure of investments in bonds and mortgages, there arises the question of incumbrances.

Incumbrances have been thus defined: "An interest in, or chargeable on, land, which may subsist in, or in

favor of, a third person, consistently with a transfer of the fee, but diminishes the value of the estate of the occupant."

Incumbrances include: mortgages and the interest thereon (as well as the claims of the mortgagee for taxes, assessments, and fire insurance); assessments, taxes, mechanics' liens, landlords' liens, attachments, judgments, visible easements, pending suits, etc. Some of these liens, to be binding on third parties, must be duly recorded in accordance with statutory provisions, or be otherwise known to exist; others may be readily ascertained through the exercise of proper diligence and care. In no case is the purchaser of incumbered property permitted to plead ignorance. He must examine records or recorded liens, and must inquire in regard to the existence of other incumbrances.

Generally speaking, the purchaser of real property takes only such title as the vendor had. It must be added, however, that a purchaser is supposed to be entitled to a good title, free of incumbrances, and that, if any incumbrances are existing, it is the duty of the vendor to remove them. Nevertheless, the covenants of the deed of sale will, in the absence of fraud on the part of the vendor, be accepted as regulating the rights and the liabilities of the parties. Thus, if property acquired is subject to incumbrances, the purchaser either agrees to take it subject to these liens, which the vendor must satisfy, or he specifically agrees to assume all liabilities for liens. In the first instance he will pay the value of the property as if it were unincumbered; in the second instance he will deduct from the purchase money the amount necessary to liquidate the liability for existing liens.

In regard to taxes and assessments, the general rule is that, whenever the vendor agrees to liquidate, or to

provide for, the liabilities, no lien whatever attaches to the vendee for taxes and assessments which are liens at the time of the contract. As to whether or not accrued taxes and assessments the extent of which is not positively ascertained, are liens at the time of the sale, depends largely upon the statutes of the individual states. There are some states, for instance, where the law provides that persons who are the owners of real property at a certain date of the year, will be liable for the taxes of that year. In a Mississippi case, it was held that where the vendor agreed to liquidate, or provide for, all liabilities, he was liable for taxes fixed by statute as due on a date prior to the contract, even though the extent thereof was not ascertained for several months thereafter.* In the state of New York, it has been held and affirmed that if the vendor covenants to convey property free of all incumbrances, taxes, and assessments, the extent of which is determined in the manner prescribed by law only after the conveyance, are liabilities of the vendee, and not of the vendor.†

In regard to all other incumbrances, it may be said that unless purchasers of real estate expressly bind themselves in the deed of sale, they are not liable to creditors of the vendor.

Accounting for Real Estate Investments

So far as accounting is concerned, property acquired subject to existing liens which are not the purchaser's liability, is recorded by merely stating what it cost; if liabilities are assumed by the purchaser, the property is recorded at its purchase value, credit being given to cash for the amount paid, and to the liabilities for the amount

* Vicksburg Waterworks Co. *v.* Vicksburg Water Supply Co., 80 Miss. 31, 68, 80.

† Lathers *v.* Keog, 109 N. Y. 583; 17 N. E. 131; affirming 39 Hun 576.

assumed by the purchaser in taking over the property; for example:

1. Investment in Real Estate..	$20,000.00	
To Cash..............		$20,000.00
For acquisition of a parcel of property located at .... as described in a deed of sale, reference to which is hereby made. The property was subject, at the time of the transfer of the fee, to a mortgage of $10,000 which the vendor has agreed to satisfy at maturity out of the proceeds of the sale.		
2. Investment in Real Estate..	$20,000.00	
To Cash..............		$10,000.00
" First Mortgage Payable		10,000.00
For acquisition of .... The property is incumbered by a first mortgage (describe) which has been assumed by the purchaser.		

Whether purchased property is incumbered or not at the time of acquisition, the purchaser may incumber it by giving to the vendor a "purchase money mortgage" covering part of the purchase price. Under these conditions, the foregoing illustrations might read:

1. Investment in Real Estate..	$20,000.00	
To Cash.............		$12,000.00
" Purchase Money Mortgage Payable...........		8,000.00
2. Investment in Real Estate..	$20,000.00	
To Cash.............		$ 4,000.00
" First Mortgage Payable........		10,000.00
" Purchase Money Mortgage Payable		6,000.00

The components of the book value of investments in real estate may be:

1. The cost of the property, including:
   a. If the property has been acquired in the real estate market, the cost of acquiring title, whatever the amount may be in particular cases, as well as commissions and brokerage incident to the purchase.
   b. If the property has been acquired as a result of foreclosure, the cost of all advances made for the account of the mortgagor by the concern in its capacity as mortgagee, such as amounts expended for taxes, for insurance premiums, and for repairs and improvements prior to acquisition of the property upon default of the mortgagor.
2. The cost of such improvements as enhance the marketable value of the buildings, or make them more desirable to tenants, or increase the rate of rentals.

If the policy of the concern is to carry its investments at market value, the fluctuations of the market are re-

No. of Property______ Name of Property______

Location______

How Acquired______

Date	Investment				Incumbrances				Income			
	Particulars	Dr.	Cr.	Bal.	Particulars	Dr.	Cr.	Bal.	Particulars	Dr.	Cr.	Bal.

Figure 40. Investment Ledger

corded periodically by means of debits or credits to the asset account, and corresponding credits and debits to the Profit and Loss account.

If the amounts involved are considerable and a great many separate parcels of property are carried, a special ledger may be assigned to the detail of the asset account. This book may be made very thorough by means of sections which will record the original value and the fluctuations of the investment, the original incumbrances attaching to the property, and the gradual extinguishment thereof, and the total of the positive and negative factors affecting the income received on the investment. The foregoing form is adaptable to the requirements of large investors.

CHAPTER XXIV

SPECIFIC FUNDS, RESERVE FUNDS, AND FUNDED RESERVES

Specific Funds

In the course of business, it frequently becomes advisable to set aside specific funds, in order that certain purposes may be fulfilled, or certain policies carried out. Thus, a social club may periodically set aside part of its receipts for the purpose of erecting a permanent home for the association; a life insurance company may set aside and intrust to influential persons, funds which are to be used to defeat proposed legislation which it considers fatal to principles of life insurance; a large concern may place considerable sums in the hands of its officers to be used for the benefit of the business at large and accounted for periodically.

These specific funds, whether known as building, emergency, legislative, working, or experimental funds, or otherwise, need have no connection whatever with profits. They are, in reality, part of the available cash of the concern, whether that cash comes from operative results or from capital contributions. Unless protected by resolutions of the directorate, they can be used for purposes other than that for which they were originally created, and whenever the amount provided is greater than the requirements, or the policy which caused their creation is abandoned, the balance reverts to the general cash. They are current assets and are stated as such on the balance sheet.

Reserve Funds

In contradistinction, reserve funds are accumulated out of realized profits; that is to say, they are brought into existence by being separated from the fund of liquid assets which have come in as a direct result of profitable operations. They are created for the express purpose of liquidating liabilities incurred in order that the earning power of the concern may be maintained or increased, or to replace physical assets when they have outlived their usefulness. They apply the principle of finance that capital borrowed to obtain income should be paid out of the income which it makes possible, or that assets which have been consumed by operations must be replaced out of profits. They can be applied only to the purpose for which they were created, and if they ever revert to the general cash it can only be because they were larger than necessary. Their ultimate disposition is so well established that they cannot be considered as current, or liquid assets; the Interstate Commerce Commission includes them among deferred debit items, that is to say, it treats them as factors which can only fulfil their mission by being debited to the particular liability which they are intended to extinguish, or to the particular asset the value of which they will eventually measure.

Funded Reserves

If corporations borrow capital in order that they may obtain therewith an income greater than the cost of borrowing, and if prudence requires that part of the excess income thus obtained be applied to the liquidation of the debt, there are two distinct ways of arriving at the required result:

1. Set aside periodically a proportion of the profits which have been realized, in cash, thereby creating reserve funds. As indicated above, this is

done by crediting cash, and debiting a fund so earmarked as to indicate the purpose of the special deposit; the cash reserved is usually invested in some manner deemed suitable or advantageous, i.e., it may be left in a deposit account with a bank, or it may be exchanged for interest-bearing securities.

2. Set aside periodically a proportion of the net profits, by debiting "Profit and Loss"—the summary account which measures them—or "Surplus"—the other summary account which contains them—and crediting properly earmarked "reserves" which will measure the aggregate amount of surplus appropriated for special purposes.

It will be noticed that either method accomplishes its purpose properly; the reserve prevents the distribution of the reserved cash profits otherwise than for the liquidation of certain obligations; the fund is just as effective, since it sets aside and earmarks as reserved for special purposes, part of the cash obtained through profits.

If a reserve has been created, and, in addition to this, cash is set aside in a special fund, it is only because of scrupulous conservatism. This operation, which is referred to as "funding reserves," has been criticized as often as the wisdom of creating reserve funds has been challenged. Railroad economists claim that to invest the large amounts necessary to liquidate the bonded indebtedness of common carriers, at a rate of interest infinitely inferior to the earnings which that money could secure if used for the requirements of the road, is equivalent to mismanagement. They further assert that the greatest security which railroad bondholders can have is the prosperity of the enterprise, and that anything that detracts

from that prosperity is detrimental to their interests; that since reserve funds, by withdrawing cash from operation, reduce the income of railroads, they should not be created, the reserve alone being sufficient.

It sometimes happens, however, that bond indentures compel the periodical payment to a trustee of certain sums which will accumulate at interest until sufficient to liquidate certain debts. When this is the case, nothing but the reserve fund will satisfy the bondholders, and the usefulness of a reserve carried in conjunction with the fund is more than problematic.

The meaning of the term "reserve fund" as given in the foregoing, is far from being generally accepted. Many writers of accounting hold that there is no difference whatever between "reserve funds" and "reserves," and that both are amounts set aside out of profits, to be used, if the occasion requires, to write down the book value of the assets to which they apply.

It is true, of course, that a reserve for depreciation of machinery will be applied to the undepreciated book value of the assets when the machinery has outlived its usefulness; but that reserve is not a fund, although it could be funded. It is also evident that a reserve for redemption of bonded indebtedness could never be applied to the reduction of any asset whatever, and that it is not a fund at all, although it is supposed to be represented by funds which are not specifically invested. The Interstate Commerce Commission appears to have settled the controversy; it requires that reserves created out of income or surplus be shown as follows, on the balance sheet of common carriers:

1. Invested in Sinking and Redemption Funds
2. Invested in Other Reserve Funds
3. Not Specifically Invested

Sinking Funds

The most common of all the "reserve funds" is the "sinking fund for the redemption of bonds." These sinking funds may be created in several ways:

1. Taking as a basis the life of the debt to be liquidated, deposit periodically amounts equivalent to 1/5, or 1/10, or 1/20 of the original amount due, less whatever interest the fund as it stands has earned during the prior period, it being understood that the last deposit produces no interest.
2. Divide the amount of the debt to be liquidated, by the amount of the annuity of $1 for the given term of the debt, at a given rate. The quotient will be the amount of dollars of each successive sinking fund instalment.

The examples A and B show that the interest earned by the sinking fund is debited to the fund itself, and credited to the earning account "Interest on Sinking Fund." It has been claimed that it should be credited to the account which is debited with the interest paid on the bonds. The intrinsic worth of such a theory is to be appraised in the light of principles of finance. The interest earned by a fund created by setting aside assets obtained out of the reinvestment of profits made possible by the incurrence of long-term liabilities, is hardly a deduction from the cost of carrying that liability.

So far as their accounting treatment is concerned, redemption funds are similar in every respect to sinking funds. The difference in terminology merely means that sinking funds are supposed to be created in compliance with what is known as the "sinking fund provision" of bond indentures, whereas redemption funds are created to retire any long-term liability which is not subject to sinking fund requirements.

Example A

Sinking Fund Invested at 4%

$50,000 of bonds issued January, 1, 1909, maturing January 1, 1914, bearing interest at 5% semiannually January 1 and July 1.

Date	Sinking Fund		Cash		Interest on Sinking Fund		Bonds	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Jan. 1, 1909	....	....	$50,000.00	....	....	....	....	$50,000.00
Dec. 31, 1909	$10,000.00	....	....	$10,000.00	....	....	....	....
Dec. 31, 1910	400.00	....	....	....	....	$ 400.00	....	....
"	9,600.00	....	....	9,600.00	....	....	....	....
Dec. 31, 1911	800.00	....	....	....	....	800.00	....	....
"	9,200.00	....	....	9,200.00	....	....	....	....
Dec. 31, 1912	1,200.00	....	....	....	....	1,200.00	....	....
"	8,800.00	....	....	8,800.00	....	....	....	....
Dec. 31, 1913	1,600.00	....	....	....	....	1,600.00	....	....
"	8,400.00	....	....	8,400.00	....	....	....	....
Jan. 1, 1914	....	$50,000.00	....	....	....	....	$50,000.00	....
	$50,000.00	$50,000.00	$50,000.00	$46,000.00		$4,000.00	$50,000.00	$50,000.00

Example B

Sinking Fund Invested at 4%

$50,000 of bonds issued January, 1, 1909, maturing January 1, 1914, bearing interest at 5% semiannually January 1 and July 1.

Date	Sinking Fund		Cash		Interest on Sinking Fund		Bonds	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Jan. 1, 1909			$50,000.00					$50,000.00
Dec. 31, 1909	$ 9,231.36*			$ 9,231.36				
Dec. 31, 1910	369.25					$ 369.25		
"	9,231.36			9,231.36				
Dec. 31, 1911	753.27					753.27		
"	9,231.36			9,231.36				
Dec. 31, 1912	1,152.66					1,152.66		
"	9,231.36			9,231.36				
Dec. 31, 1913	1,568.02					1,568.02		
"	9,231.36			9,231.36				
Jan. 1, 1914		$50,000.00					$50,000.00	
	$50,000.00	$50,000.00	$50,000.00	$46,156.80		$3,843.20	$50,000.00	$50,000.00

* Annuity tables give the amount of the annuity of $1 for 5 years @ 4%, as $5.416323.

CHAPTER XXV

ACCRUED INCOME NOT DUE

Income from Investments

The income from: (1) investments in real estate, (2) bonds of other companies, loans on collateral (call or time), bonds and mortgages, and (3) stocks of other companies, is, in the order given: rent, interest, and dividends.

Since the date at which rents and interest mature does not always coincide with the last day of the accounting period, it follows that an amount of income on investments may have been earned which does not appear on the books, because cash has not been received therefor.

The Cash Basis

It may be that the policy of a concern is to keep its books on the "cash basis," that is to say, to consider as income earned only that which has been received in cash, and that, correspondingly, only expenses paid in cash constitute income disbursed. This policy has the great disadvantage of not being consistent. It rests upon the possibility that the right to receive income may be lost by the failure of the debtor to pay what he owes, and upon the impossibility of enforcing payment when such contingency occurs. But if the basis is correct, it should apply also to accounts receivable recorded as a result of

sales on credit, since the amount charged to customers contains not only the cost of the goods sold to them, but, as well, the profit realized on the sales. It is obvious that if it is sound theory to ignore income until it is received, it is also sound theory to ignore the profit on sales until the customers have paid the indebtedness which contains those profits. Yet it is doubtful whether a single instance could be found where a business concern which claims to be on a cash basis is consistent enough to apply that basis to merchandise transactions.

The Accrual Basis

Many concerns keep their books on the "accrual basis." This method applies the accounting principle that the primary connection between the net assets and the net income derived therefrom, is a matter of earnings and of expense incurred, and not one of income received in cash and expenses paid in cash. It takes cognizance of the fact that unless income is recorded when earned, losses due to the failure to collect that income cannot appear on financial statements.

It might be supposed that an accountant had earned, during a calendar year, say, $10,000, and had been unable to collect more than half of that sum, the balance being bad debts. If his books were kept strictly on the cash basis his earning capacity would be shown to have been $5,000 during that year, and no loss would appear in his income account. If his books were kept on the accrual basis, that capacity would be shown to have been $10,000, and his financial statements would show the fact that, being unable to collect more than half of that sum, he had sustained a loss of $5,000, owing to the financial incapacity of his clients or their bad faith.

Leaving expenses and liabilities out of the question for the time being, the adoption of the accrual basis

means that at the end of every accounting period, all income which has been earned during that period must be recorded as an accrued asset which, while perhaps not collected at the time, because it is not due, may be collected at some future time. This, of course, necessitates the recording of an income which will be credited to the profit and loss of the period, whether or not the accrued asset which it represents fails of collection. Thus, if the last interest receivable on investments in bonds of other companies or in bonds and mortgages or in loans on collateral, was received December 1, and the accounting period ends December 31, there has been earned interest for one month, which is an asset of the investor as well as it is his income for the month of December.

Nature of Dividends

Dividends differ materially from rentals and interest; they do not belong to the stockholders until they have been declared and the knowledge of the resolution of the board of directors has become known outside of the board room. Hence, it is not possible to take as an asset and as income, dividends which are expected on investments in stocks of other companies, since there is no certainty that the directors will deem it advisable to distribute part of the surplus. But if a dividend has been declared, its amount must be taken both as an asset and as income, even though it be made payable months later. The legitimacy of the asset cannot be denied, since, after a dividend has been declared, it cannot be rescinded unless it has been established that its declaration was illegal.

Record of Earnings on Investments

The journal entries giving expression to the earnings on investments and to the corresponding accrued assets which they represent, are as follows:

Accrued Rentals—Real Estate..	$........	
Accrued Interest on Bonds of Other Companies..........	....	
Accrued Interest on Bonds and Mortgages...........	....	
Accrued Interest on Collateral Loans	....	
Dividends Receivable (declared)	....	
To Rentals on Real Estate		$........
" Interest on Bonds of Other Companies		....
" Interest on Bonds and Mortgages..		....
" Interest on Collateral Loans.......		....
" Dividends on Stocks of Other Companies		....

To set up both the asset and the income derived from investments.

Whatever is collected on the asset should be credited to the asset account, in order that it may show at any time the balance accrued thereunder, and not as yet collected or collectable. The income account should contain no credits whatever on account of cash receipts, and the debit side of the accrued asset should at all times be equal to the credit side of the earning account. This means that if an investment is sold or expires during an accounting period, the first care of the accountant should be to make both the asset account "Accrued Interest" and the income account "Interest" reflect, in anticipation,

that part of the proceeds of the sale or of the settlement at maturity, which will not represent principal. Unless this is done, the books will show that interest income was obtained partially through the accrual of an asset and partially through the receipt of cash.

To illustrate: On January 15, 1914, A loaned B, against proper collateral, $10,000, at 6%, principal repayable on July 15, 1914, interest payable at maturity. A closes his books on the last day of every month.

At July 15, 1914, prior to the settlement made by B, A's books show, on the 360-day basis:

INVESTMENT IN LOANS ON COLLATERAL

1914						
Jan. 15	Cash	$10,000.00				

ACCRUED INTEREST ON LOANS ON COLLATERAL

1914						
Jan. 30	Interest on Loans on Collateral..	$ 25.00				
Feb. 28	" ..	50.00				
Mar. 31	" ..	50.00				
Apr. 30	" ..	50.00				
May 31	" ..	50.00				
June 30	" ..	50.00				
		$275.00				

INTEREST ON LOANS ON COLLATERAL

1914			1914		
Jan. 30	Profit & Loss..	$ 25.00	Jan. 30	Accrued Interest on Loans on Collateral	$ 25.00
Feb. 28	" ..	50.00	Feb. 28	"	50.00
Mar. 31	" ..	50.00	Mar. 31	"	50.00
Apr. 30	" ..	50.00	Apr. 30	"	50.00
May 31	" ..	50.00	May 31	"	50.00
June 30	" ..	50.00	June 30	"	50.00
		$275.00			$275.00

Now, if upon settlement by B, on July 15, 1914, A makes the following entry:

Cash	$10,300.00	
To Investments in Loans on Collateral		$10,000.00
" Accrued Interest on Loans on Collateral		275.00
" Interest on Loans on Collateral....		25.00

it is evident that the asset account "Accrued Interest" will fail to reflect the whole amount of the earnings to which it owes its existence, and that the earning account will be composed of two distinct elements:

1. One, said to be an earning, due to the fact that an asset receivable was placed on the books.
2. The other, said to be income, due to the fact that cash came in, in settlement of interest earned.

Would it not be more logical to carry the theory of accruals throughout the accounting period, and on the day of settlement of the loan make the following journal entries?

1. Accrued Interest on Loans on Collateral...........$	25.00	
To Interest on Loans on Collateral.....		$ 25.00
For interest accrued to date of settlement of principal and of interest on loan of $10,000 secured by collateral, maturing this day.		

2. Cash	$10,300.00	
To Loans on Collateral		10,000.00
" Accrued Interest on Loans on Collateral ...		300.00
For settlement of loan and collection of assets receivable on account of interest from January 1, 1914, to July 15, 1914.		

Income from Bonds

If reference is made to the discussion of investment in bonds of other companies,* it will be found that the nominal account representing the income derived therefrom, may under certain conditions contain debits and credits for amortization and accumulation of cost of investments to par. It must be said at this point, that even where investments are carried at par, and separate accounts are kept for discounts and premiums, the nature of these latter accounts is such that they should be written down by means of periodical credits and debits to the nominal account representing interest on investments in bonds, and not, as is so often the custom, by credits and debits to the Profit and Loss account.

When the conditions just described prevail, the asset account "Accrued Interest on Investments" should contain the nominal rate receivable on the face of the bonds, since in case of default the amount claimed by the investor will be the principal, i.e., par, plus the interest on par at the rate stated on the instrument of credit. As to the earning account, it should reflect the true income

* Chapter XXIII.

which the bonds were to produce at the price at which they were acquired. This is the only case where the debit side of the asset account "Accrued Interest on Investments" should not duplicate exactly, and, at all times, the credit side of the earning account "Interest on Investments."

CHAPTER XXVI

ACCOUNTS PARTIALLY REAL AND PARTIALLY NOMINAL—DEFERRED DEBIT ITEMS

Allocation of Periodical Expenses

When a concern has adopted the policy of charging against the income of a period, all the expenditures made and all the obligations incurred during that period for the protection of the physical assets, as well as for the acquisition of minor supplies intended to be consumed through the operation of the business as a whole, the question of accounts partially real and partially nominal arises only in connection with trading or manufacturing goods.*

The policy referred to above is often qualified as "conservative" by those who have adopted it. Usually, however, it is objectionable to accountants because, by making the profits of certain periods suffer a detriment for the benefit of other periods, it destroys utterly the value of comparisons.

When profits are ascertained yearly, it may be said with a semblance of truth that the law of averages is likely to make all periods very nearly alike, since the same expenses are bound to occur year in and year out, unless changes of policy have taken place in the interim. Still, this is not always true. Let us assume, for instance, that on January 2, 1912, a building was insured against fire, the policy covering a period of three years; it is obvious that because the year 1912 has been made to bear the

* Discussed in Chapter XVI.

burden of the whole insurance premium paid during that year, the profits will suffer by comparison with the future profits of the years 1913 and 1914. And, if in the year 1913 a large amount of stationery is acquired in order to take advantage of the considerable saving which large orders afford when type has to be set up, it is evident that unless the cost of these supplies is spread over the periods in which they are consumed, the year 1913 will sustain a burden which the law of averages will not relieve in the least.

It is for this reason that accountants recommend that, at the end of every accounting period, a sharp line be drawn between the expenses applicable to the period which has just expired, and the expenses applicable to subsequent periods.

Common Accounts Partially Real and Partially Nominal

The individual accounts which may be considered as partially real and partially nominal, vary according to the particularities of business. The most commonly found are:

1. Fire Insurance Premiums
2. Advertising Contracts
3. Stable Supplies
4. Stationery and Printing
5. Advertising Matter

These accounts are subject to periodical inventories. This statement applies even to fire insurance premiums, since, to ascertain the amount applicable to subsequent periods, it is necessary to marshal the policies, and consider their terms. It is precisely because the values which they represent are susceptible of being inventoried, that they are to be found stated under the balance sheet group "Working and Trading Assets," together with the inventories of trading goods, manufacturing materials, goods in process, and finished goods.

Fire Insurance Premiums

The advisability of carrying as an asset the portion of the fire insurance premiums which applies to periods subsequent to the one at issue, results not only from the requirements of proper accounting, but, as well, from the very nature of the contract of insurance for which the premium paid is the consideration.

The law provides that whenever an insured party surrenders his policy, orders it canceled, and demands the refund of the unconsumed proportion of premium paid thereunder, his right to the refund shall be absolute, provided the policy contract contemplates the eventuality of cancellation. The amount of premium to be refunded will not, however, be the proportion of the whole which applies to the unexpired period covered by the original contract. It will be the amount of the premium, less what the cost of insurance would have been if the policy had been issued for the time during which the insurer was in the risk.* The insurer may, besides, deduct from the amount of the premium to be returned, his "reasonable" expenses in writing the policy.

Hence, the amount of fire insurance premiums which going concerns carry as an asset at the end of an accounting period, is never the exact amount which would be received if the policy were to be canceled on what is called the "short rate" basis. Still, for the purpose of statements purporting to show the financial status of such concerns, it is evident that the only expense incurred on account of fire protection, is the proportion of it which applies to the period covered by the statement, since there is no intention of surrendering the policy.

For the purposes of statements purporting to exhibit the financial status of a concern facing liquidation through financial distress or otherwise, it is better to carry the asset

* Matter of Independence Insurance Co., 13 Fed. Cas. No. 7015.

"Fire Insurance Premiums, Unexpired Proportion," at the probable value to be received upon cancellation of the policy. What that value will be, is indicated by what is known as "Union Short Rate Tables."

Advertising Contracts

When advertising contracts have been paid in advance, it is customary to apportion their cost over the periods during which they run. The word "paid" does not necessarily mean paid in cash. If a going concern has placed an advertising contract for a year, agreed to pay monthly a sum of $100 therefor, and recorded its rights and duties under the contract in the following manner:

Advertising Contract..........	$1,200.00	
To Creditor's Account...		$1,200.00

it has, so far as accounting is concerned, paid $1,200 in advance, since it has recorded a lien of that amount against the assets held. Hence, unless it treats the unconsumed portion of the consideration for the liability as an asset, it will not state its true financial status.

What the value of an unexpired advertising contract is to a concern about to liquidate, depends naturally upon the terms of the contract itself. If it has been paid for in cash in advance of the performance by the advertising concern, a compromise agreement may be reached whereby the client will receive back a portion of his payments, in consideration of the cancellation of the contract. The recording of such a transaction would consist in debiting cash with the amount received, debiting profit and loss with the loss (if any) represented by the excess paid in advance, under the contract, over the amount returned, and crediting the asset account "Advertising Contracts, Unexpired Portion."

If the business concern makes monthly payments, but has recorded the whole contract as suggested in the foregoing entry, and, upon a plea of impossibility to perform, has obtained a cancellation of the contract, the only accounting necessary will be to debit the liability account reflecting the amount still due under the contract, and to credit the asset account supposed to represent the right of the concern under the contract now canceled. This, of course, is true only if the two amounts are equal.

If the contract is assignable, that is to say, if no provision thereof opposes its being assigned, and if there is no liability to be incurred thereunder by the assignee, the concern assigning its rights will merely debit cash with the amount of the consideration received from the assignee. Any difference between the book value of the contract and the consideration for its assignment will be debited or credited (as the case may be) to profit and loss.

Stable Supplies, Stationery and Printing, Advertising Matter

The individual inventorial value of these assets may or may not be deemed important enough to be included in the balance sheet; still, the amount of an account should have no bearing whatever upon its treatment at the end of a period. Unless this principle is carefully applied at all times, the cost of operations of any given period may be incorrectly stated, to say nothing of the financial status of the concern.

Stable supplies are obviously a valuable asset of a going concern as well as of a concern about to liquidate. In the latter case, they are subject to market fluctuations, and to the hazards of an auction sale; but they are at all events a legitimate asset.

The value of stationery and printing is so problematic

to a going concern that the Insurance Department of the State of New York does not permit of its being shown in the balance sheet of insurance companies; the application of the unexpired portion of the account to any given period, involves the consideration of the proper time to charge to expense, books of account, records, and memoranda, which may outlive considerably the period in which they are put in use; furthermore, the question of obsolescence of type is forever present in the consideration of the inventorial value of the asset. As to concerns about to liquidate, the value of the asset to them is, of necessity, its scrap price.

The value of advertising material remaining on hand at the end of a period, from the point of view of a going concern, is its cost. This, of course, is true only provided the advertising policy of the concern has undergone no radical change during the period. In the contrary case, the cost of the now obsolete material must be charged to profit and loss. To a concern about to liquidate, advertising material is mere scrap.

Clearing Partially Real and Partially Nominal Accounts

Accounts partially real and partially nominal must be relieved periodically of their nominal portion, or of their real portion. In the first instance, they are considered as inventory accounts, the consumed portion of which is to be charged to profit and loss; in the second instance, they are considered as nominal accounts, which may or may not be entirely consumed for the purpose intended. If not entirely consumed, the real portion must be carried forward as an asset. In either case, the treatment is the same. It is not, however, necessary to wait until inventory time to determine the nominal portion of these accounts. If treated as inventory accounts they may be credited whenever part of the material which they contain is

issued to the stable, or to the different departments and offices of the organization as a whole.

First Method

The Stable Supplies account of a concern opens on January 1, 1914, with an inventory of $150; during the subsequent accounting period, there is purchased on credit, $500 worth of supplies. At the end of the period the inventory shows an asset of $75. The accounts affected by the transaction stated would show:

STABLE SUPPLIES

Account considered as inventory account or as a nominal account with a possible residual value.

1914			1914		
Jan. 1	Stable Supplies (Old Account)	$150.00	June 30	Profit and Loss	$575.00
June 30	Creditors	500.00		Stable Supplies (New Account)	75.00
		$650.00			$650.00
July 1	Stable Supplies (Old Account)	$75.00			

PROFIT AND LOSS

1914					
June 30	Stable Supplies	$575.00			

Second Method

The Stationery and Printing account of a concern opens January 2, 1914, with an inventory of $300; during the period there is purchased on credit $250. In February, $175 worth of material was issued to the administrative department; in March, $50 worth was issued to the factory office. In May, $80 worth was issued to the

selling department. At the end of the period the status of the accounts affected by the above transactions is as follows:

STATIONERY AND PRINTING

1914			1914		
Jan. 2	Balance	$300.00	Feb. 28	Stationery and Printing Expended — Administration	$175.00
June 30	Creditors	250.00	Mar. 31	Stationery and Printing Expended — Factory Office	50.00
			May 30	Stationery and Printing Expended — Selling	80.00
			June 30	Balance	245.00
		$550.00			$550.00
July 1	Balance	$245.00			

STATIONERY AND PRINTING EXPENDED—ADMINISTRATION

1914					
June 30	Stationery and Printing	$175.00			

STATIONERY AND PRINTING EXPENDED—FACTORY OFFICE

1914					
June 30	Stationery and Printing	$50.00			

STATIONERY AND PRINTING EXPENDED—SELLING

1914					
June 30	Stationery and Printing	$80.00			

Deferred Debit Items

The expenses and losses incurred and sustained during a given period, may not apply to that particular period; if, for instance, an accounting period comes to a close on June 30, and during that month there has been paid $150 for rent of June and July, it is obvious that the application of $75 to the rent expense must be deferred until the subsequent period. Similarly, if a note maturing three months from June 15 has been discounted on that day, the loss of the discount cannot be made to fall upon the month of June, but must be spread over the three months ending September 15.

The items which may be properly included among the deferred debits, are not assets in the strict sense of the word, since the question of their availability never arises. So far as the average business is concerned, they represent expenses which have no residual value other than the benefits for which they have paid but which will be enjoyed only in subsequent periods, or losses which respect for the accounting truth requires to be apportioned to the periods to which they legitimately belong.

The Interstate Commerce Commission has greatly extended the generally accepted meaning of the word "deferred" when applied to accounts; and this will be referred to again when speaking of the effect of the commission's rulings upon accounting theories and methods.

Generally speaking, deferred debit items include:

1. Rent paid in advance
2. Taxes paid in advance
3. Interest and discount, proportion applicable to subsequent periods
4. Premiums paid on investments
5. Discounts suffered on issues of long-term obligations

The treatment of these accounts at the end of the accounting period, consists merely in crediting them individually with the portion applicable to the operations the result of which it is intended to ascertain, and debiting profit and loss, or group accounts raised to be apportioned to other general classes of facts.

Desire for analytical expression of financial facts has often led accountants to classify deferred debits in accordance with the effect which they will have upon the financial statements of future periods. They have at times been stated as follows:

1. Deferred debits to Operating Expenses
2. Deferred debits to Deductions from Income
3. Deferred debits to Profit and Loss

Organization Expense

What the components of each group of deferred debits will be, depends naturally upon the peculiarities of the business. To illustrate, as to group 3, one of the most familiar of the factors which it may contain, is organization expense.

At the birth of a corporation, a multitude of expenses are incurred which are necessary to fulfill statutory requirements, and to set in motion the mechanism of the corporate body and the operations of its business.

The first group of such expenses includes the fees paid for incorporation, and for the filing and acknowledging of papers.

The second group includes the fees paid to the promoter for his services, and to the lawyer for conducting the organization in a legal manner; also the cost of printing and circulating prospectuses, and of soliciting subscriptions; the cost of acquiring the necessary corporate equipment, such as corporate records, seal, etc.; the cost

of printing and issuing certificates of stock, and the cost of conducting the temporary office of the company pending organization.

The third group includes perhaps the cost of inducing skilled superintendents, foremen, and workingmen to abandon their present occupation, and to enter the employ of the company.

There is no doubt that the benefits derived by the corporation from these expenditures will be felt so long as it remains actively engaged in business. This is so true that the Italian law does not permit corporations to write off their organization expenses otherwise than proportionally during their official life, which extends for fifty years. In America, where perpetuity of corporate life is usually granted, it would not be possible to apply such a rule. On the other hand, unless the expenses of organization are written off during a certain number of periods, the balance sheet will forever contain an asset which has no salable value and which does not in any way tend towards the proper presentation of the financial status. Hence, it is customary to arbitrarily fix a number of years for the amortization of organization expenses. This is done by periodically crediting the account with the desired proportion, and charging profit and loss.

The Public Service Commission for the first district of the State of New York prescribes that the corporations organizing under its jurisdiction, keep an account with "Organization," to which shall be charged "all fees paid to governments for the privilege of incorporation, and all office and other expenditures incident to organizing the corporation or other enterprise and putting it in readiness to do business." On the other hand, the Interstate Commerce Commission requires that these expenses be included in the cost of construction and equipment. In Austria and Hungary the corporation is

permitted to assess stockholders in the amount necessary to wipe off the expenses incident to the organization of the company, while in Germany the same purpose is obtained by selling stock at a premium calculated to defray the cost of organizing.

Part IV—The Theory of the Liability Accounts

CHAPTER XXVII

CAPITAL STOCK

The Share and Its Functions

In America a corporation may exist without issuing, under the form of shares, evidences of the contribution of capital by its members; it is understood, however, that in order that such corporations—which are known as "corporations aggregate"—may enjoy a perpetuity of life, the rights of the original members to the capital contributed by them, shall pass to their successors together with the property acquired out of capital and with the corporate privileges.

Generally speaking, corporations issue shares of stock to their stockholders, which, at the time of such issue, indicate the extent of the contributions of the stockholders, and, thereafter, the proportion in which the holders whose names are registered on the corporate books will participate in the distribution of profits while the company continues as a going concern, and in the remainder of the assets and surplus after liquidation of the liabilities at winding up.

Lindley, in his work on "Partnerships," refers to capital stock as follows: "When a company is formed, a sum of money is fixed upon, and is called its capital; this sum is divided into a number of equal portions; each

of these portions is a share, and whether the sum fixed upon is ever all subscribed or not, and whether what is subscribed is employed profitably or to the contrary, a share retains its original meaning."

If a share of stock has a meaning when issued, that meaning must be that the legal entity which issues the document intends it as an evidence of its indebtedness to the original holder, his heirs, or assigns, for the net assets acquired out of the capital originally contributed and out of the reinvestment of undivided profits. If this were not true, the legal doctrine which holds that the title to the assets of a corporation rests in the corporation, would be meaningless, and the stockholders would be tenants in common, precisely like partners.

Capital Stock as a Liability

The fact that capital stock is truly a liability, is insisted upon, because of the spread in recent years of an academic theory which attempts to establish a distinction between "liabilities" and "accountabilities." It maintains that capital stock, surplus, and reserves are "accountabilities" which merely measure the extent of the stockholder's "proprietorship" in the assets of the corporation. It makes the corporate balance sheet subservient to the following formula of double-entry bookkeeping, which is only expressive of the nature of the proprietor's equity: "Assets less liabilities, equal proprietorship."

So far as sole traders are concerned, they are unquestionably the owners of that part of the assets which will not be consumed for the liquidation of liabilities. Hence, for these two classes of business organization, the balance sheet is nothing more than the classified and detailed expression of the above-mentioned bookkeeping formula.

The proprietors have invested in the business the whole or part of their wealth, consisting of real or personal property, or both; their business is not an entity which the law recognizes; it is not a "person" in any sense of the word, not even in contemplation of law; it owns nothing, owes nothing, and is nothing. The expression "My business is prosperous" means nothing more than "I am prosperous in business." The invested assets of a sole trader may be seized, upon due process of law, by anybody who has a valid claim against the owners of the equity in the investment, as measured by the result of the subtraction of the liabilities from the assets.

As to copartnerships the same rules apply, with this exception: they are entities which the law recognizes only to the extent of permitting the individual creditors of the partners to share only in the assets which have not been used to liquidate the debts of the copartnership.

The corporation, on the other hand, is an entity, none the less real because it is invisible and intangible. It is a legal being invested with a written permit to exist, to possess, to contract, to sue, to be sued, and, generally speaking, to conduct the particular business for which it is created.

To fulfill its purpose a corporation requires capital Since it has nothing at birth but the power to act as a human being for a far longer period and with a greater continuity of purpose than is the lot of mortals, it must obtain capital through the contributions of those who believe in its ultimate fortunes and in the adequacy of its special organism for the fulfillment of its particular purpose; or if this is not sufficient, it must finance itself as best it can, by pledging as security the assets obtained through the investment of moneys contributed by its sponsors. It goes without saying that if it were true that the stockholders own the corporate assets, the cor-

poration could not violate the law and pledge that which it does not own. Indeed, the peculiarity of the status of the legal being known as the corporation, is that it owes everything which it owns.

To show to what extent the anonymous sponsors of the corporation have equipped it with its original capital, there is issued to them shares of capital stock which become the personal property of the stockholders, precisely as the assets acquired by means of that capital become the real or the personal property of the corporation.

The issue of stock measures the extent of the corporation's liability for original capital, or for subsequent increases thereof. The stockholders hold that evidence of the corporate liability to them, but they have absolutely no title to the assets. They cannot re-enter into possession of them otherwise than by causing the death of the legal being whose birth they have brought about. Their individual creditors cannot seize any asset of the corporation to satisfy their claims against the stockholders. They can, however, by due process of law, secure for themselves the stockholdings of their debtors. These stockholdings measure their owner's evidence of the corporation's liability:

1. At winding up, for money, property, or services originally contributed, as represented by the capital stock outstanding, expressed at par.
2. Also at winding up, or at any time deemed advisable by the corporation speaking through its directorate, for increments arising from the reinvestment of undivided profits, as measured by:
    a. The surplus
    b. Such reserves as do not contain:
        (1) Losses temporarily withheld from the asset which they would otherwise reduce (reserves charged to cost)

(2) Losses incurred but not as yet paid through the outgo of an asset (operating reserves such as, "For Injuries")

i.e., all the reserves appropriated out of surplus.

Capital Stock Records

The rights of the stockholders to the benefits accruing from the profitable employment of the capital represented by their shares, is closely safeguarded by statutes. The total amount of the capital stock indebtedness which the corporation may incur, is well known, since the charter states it, and it cannot be increased in violation of the rights of the original contributors. Indeed, if the authorized amount of capital stock is overissued, the purchasers of the excess do not acquire any rights whatever as stockholders, although they may have a cause of action for damages against the corporation for any harm done to them. Thus, so far as accounting is concerned, the financial books of a corporation must be so kept as to reflect at all times the authorized issue of capital stock, the amount actually issued, and the balance unissued, otherwise known as "potential stock." This can be done in two ways:

1. At the time of opening the books, make a *pro forma* journal entry stating fully the authorized issue, divided into as many classes of stock as the charter contemplates, and, thereafter, frame an explicit *pro forma* entry whenever an authorization to increase the issue is obtained. When this is done, a reference to the journal will give the total authorized issue, even though the minute book is not available. As to the portion of that authorized issue which is actually outstanding, it will be

given by the sundry accounts with the sundry classes of capital stock, which will be credited at the time of issuing.

Expressed in journal form, the requirements of this method might appear as follows:

THE A. B. C. COMPANY

GENERAL JOURNAL

January 2, 1914

The A. B. C. Company, incorporated under the laws of the State of New York, with an authorized capital stock of five hundred thousand dollars ($500,000) divided into five thousand (5,000) shares of common stock, of the par value of one hundred dollars ($100) per share, with express and implied power to conduct a general manufacturing business.

Cash	$ 75,000.00	
Property, Plant, and Sundry Assets...........	325,000.00	
To Capital Stock.......................		$400,000.00

For issue of capital stock in consideration of cash subscriptions to 750 shares and of property, plant, and sundry assets acquired from John Harrison, as per contract on file.

The balance sheet of the company would show:

BALANCE SHEET

Assets		*Liabilities*		
Cash	$ 75,000.00	Capital Stock		
Property, Plant, and Sundry Assets......	325,000.00	Authorized	$500,000.00	
		Less Unissued	100,000.00	
		Issued and Outstanding		$400,000.00
	$400,000.00			$400,000.00

2. When opening the books, state the "potential stock" as a debit representing the right of the company to issue the stock, and as a credit representing the extent of the stock liability which the corporation has been authorized to incur. The names to be borne by the two classes of statistical accounts may be:

Debits:
- Unissued Capital Stock—Common
- Unissued Capital Stock—Preferred

Credits:
- Capital Stock Authorized—Common
- Capital Stock Authorized—Preferred

Subsequently, when capital stock is issued, debit the particular asset obtained as a consideration for the issue, and credit the "unissued" account. By itself, the balance of the unissued account represents the extent of the potential stock, and when deducted from the "authorized" account, it measures the actual capital stock liability of the corporation.

AUTHORIZED CAPITAL STOCK—COMMON

	Unissued Capital Stock —Common $500,000.00

UNISSUED CAPITAL STOCK—COMMON

Authorized Capital Stock—Common ... $500,000.00	Cash .... $ 75,000.00
	Property, Plant, and Sundry Assets...... 325,000.00

CASH

Unissued Capital Stock —Common $75,000.00	

PROPERTY, PLANT, AND SUNDRY ASSETS

Unissued Capital Stock —Common $325,000.00	

If all the authorized issue of capital stock has been subscribed, partially paid for, and issued subject to subsequent calls, the whole authorized issue constitutes a liability of the corporation and must be so stated. The reason for this accounting treatment is to be found in the spirit of the law regulating corporate bodies. A subscriber to capital stock who has received the stock upon partial payment of its price, has no power to surrender his shares. Corporations may, indeed, exercise the power to make *bona fide* compromises with subscribers when their doing so does not jeopardize the interest of third parties; they may also forfeit the shares issued to individual stockholders who have defaulted on the payment of calls legally made; but generally speaking, the doctrine prevails that corporations have not power to release a subscriber from the obligations incurred under his subscription contract. The reason for the denial of that right is that the unrestrained exercise thereof would work to the prejudice of other subscribers and creditors.

If all the stock has been subscribed, partially paid for, and issued subject to subsequent calls, the application of the requirements of the second method described above will give:

CAPITAL STOCK AUTHORIZED

(One account for each class of stock)

	Unissued Capital Stock $500,000.00

UNISSUED CAPITAL STOCK

(One account for each class of stock)

Capital Stock Authorized $500,000.00	Capital Stock Subscribed $500,000.00

Subscriptions to Capital Stock

(One account for each call)

Capital Stock Subscribed	$500,000.00	Calls 1 and 2	$250,000.00
		Balance (Uncalled subscriptions)	250,000.00
	$500,000.00		$500,000.00
Balance	$250,000.00		

Capital Stock Subscribed

(One account for each class of stock)

Unissued Capital Stock	$500,000.00	Subscriptions to Capital Stock	$500,000.00

Cash

Subscriptions to Capital Stock, Calls 1 and 2	$250,000.00		

and the balance sheet expressing the above facts will be:

Balance Sheet

Assets		*Liabilities*	
Cash	$250,000.00	Capital Stock Authorized, issued and outstanding	$500,000.00
Uncalled Subscriptions	250,000.00		
	$500,000.00		$500,000.00

If all the authorized issue of capital stock has been subscribed, and partially paid for, and the stock remains unissued until all the subscriptions have been paid, the facts will be expressed as follows:

Capital Stock Authorized

		Unissued Capital Stock	$500,000.00

Unissued Capital Stock

Capital Stock Authorized	$500,000.00		

Subscriptions to Capital Stock

Capital Stock Subscribed	$500,000.00	Cash	$250,000.00

Capital Stock Subscribed

		Subscriptions to Capital Stock	$500,000.00

Cash

Subscriptions to Capital Stock	$250,000.00		

and the balance sheet will show:

Balance Sheet

Assets		*Liabilities*		
Cash	$250,000.00	Capital Stock Authorized	$500,000.00	
Uncalled Subscriptions	250,000.00	Less: Unissued	500,000.00	
		Capital Stock Subscribed		$500,000.00
	$500,000.00			$500,000.00

This, it will be noticed, is equivalent to stating that the corporation is not as yet liable to stockholders for stock issued, but that it will become so liable to them as soon as they have performed their share of the subscription contract.

The Status of Unissued Stock

Teachers of accounting maintain that unissued capital stock is expressive of nothing but a corporation's right of issue under its charter; that it is not an asset any more than the admitted capability of an individual to earn $10,000 a year is an asset of his until he has actually earned the amount; that it is not a liability any more than the possibility of mortgaging a parcel of real estate is a liability until a sum of money has been borrowed and the property has actually been mortgaged. If their contention is based upon the status of the certificates still attached to the stubs in the stock certificate book, it is undoubtedly true. If, however, the certificates have been detached from the stubs, signed, sealed, assigned in blank, and placed with transfer agents or other financial officers, ready for sale and delivery, there is at least one excellent reason for considering the shares they represent both as an asset and as a liability; it is that the Interstate Commerce Commission requires that they be so treated for balance sheet purposes. On page 26 of its pamphlet "Form of General Balance Sheet Statement for Steam Roads," and under the subheading "Capital Stock" of the general heading "Liabilities," it says:

"The amounts included in this account should be divided so as to show: (1) The par value of certificates (pledged or unpledged) held in the company's treasury, by its agents or trustees, or otherwise subject to its control." On the same page, there is a footnote to the effect that, "for the purposes of the balance sheet statements, stock is considered as 'issued' when certificates are signed and sealed, and placed with the proper officer for sale and delivery."

Premiums on Capital Stock

Generally speaking, statutes do not permit capital

stock to be issued for less than par; hence, so far as the issue of stock to subscribers is concerned, it is unusual for a corporation to incur a capital stock liability greater than the consideration therefor. It is, however, quite frequent that subscriptions realize more than the par value of the stock. How are the premiums on stock to be considered, in the light of the principle that the capital stock liability is to be carried at par?

Premiums realized on capital stock are neither income nor profits, since the word income means, that which has come in as a result of the investment of capital in any form whatever; while the word profit means that which has come in, in excess of the cost of the capital which has been sold. Premiums do not represent the excess of capital obtained in exchange for a liability, but the excess obtained over the par value of the shares of stock expressive of that liability. This is true in any event; it does not matter whether the premiums were obtained at the time of the original subscription, or subsequently upon the sale of the unsubscribed portion of the original authorized issue, or again upon sale of a properly authorized increased issue.

The treatment of premiums on capital stock as a profit, places the corporation in the position of admitting that it has been guilty of sharp practices upon its stockholders. As a consequence, it will have to return to the stockholders that which it has exacted from them in excess of the par value of the liability which it has incurred towards them. If dividends are declared out of premiums on capital stock, and the cash which the premiums placed at the disposal of the corporation is returned to the stockholders, where is the advantage of such financing?

Premiums on capital stock should no more be sent to the credit of the Profit and Loss account than they should be sent to the surplus available for dividends. It has been

suggested that they be credited to a special account so earmarked as to indicate that it is not available for distribution. But is not this an admission that these premiums constitute a liability of the corporation? As a matter of fact, premiums obtained on the issue of stock which has a par value are a capital stock liability precisely as they would be if the stock had no par value, and there was no accounting objection to stating the capital stock at the amount of its proceeds. And is it not because the fact that premiums on capital stock constitute a liability, cannot be denied, that the Interstate Commerce Commission requires that they be treated as such by the public service corporations which come under its jurisdiction? The commission has ruled as follows: "When any issue of capital stock is sold or exchanged by or for the respondent company for a consideration the actual value of which exceeds the par value of the stock at the time of such sale or exchange, the premium so realized should be credited to a ledger account provided for discounts and premiums on all classes of stock sold. If the net balances in the accounts for discounts and premiums on all classes of stock sold is a credit balance, the amount should be included in this account. This balance should be carried permanently on the balance sheet unless extinguished by discounts suffered on subsequent sales of stock, or by retiring stock. When any stock is retired, the proper discounts and premiums account should be adjusted by debiting it with an amount equal to the extinguished premium on such stock."

Discount and Premium Accounts

If premiums are to be carried permanently on the credit side of the balance sheet, it follows that, for the sake of consistency, discounts should be carried permanently on the asset side as a partial offset to the liability expressed at the par of the shares, instead of being debited to profit and

loss, in either a lump sum or throughout a period of years. The net amount paid by the stockholders for their stock is indeed that which they may expect to receive at winding up, irrespective of the dividends declared in the past. This is true whether or not the company has legally or illegally accepted as payment in full the consideration for the stock paid by the stockholder.

In regard to discounts on capital stock, the Interstate Commerce Commission has ruled that "if the net of the balances in the discounts and premiums accounts for all classes of capital stock sold is a debit balance, the amount should be stated in this account (Unextinguished Discount of Capital Stock). This balance should be carried on the balance sheet (asset side) until extinguished by premiums realized on subsequent sales of stock, by assessments levied on the stockholders, by appropriations of income or free surplus for the purpose, or by retiring the stock. When any stock is retired, the proper discount and premium account should be adjusted by crediting to it an amount equal to the unextinguished discount on such stock."

Treasury Stock

Capital stock which has been legally issued is looked upon by the law as a liability of the corporation issuing it, until it has been liquidated, on the winding up of the corporation, through the distribution to the stockholders of the remainder of the assets after liquidation of all liabilities to outsiders, or until it has been legally canceled after authorization given by the stockholders assembled at a meeting legally called to consider the cancellation. It follows that if stock has been acquired in the open market by the company responsible for its issue, in pursuance of some financing scheme, or donated to the company by the stockholders to be resold for the purpose of obtaining additional capital, such stock must be an asset. It is not "potential stock," since

it has been issued; it is "actual stock" held in the treasury pending disposition. It is usually carried as "treasury stock," but the term does not seem to be satisfactory, because it conveys to many the idea that it represents stock held in the treasury, whether or not it was once issued. It might be more in keeping with the efforts of modern accountancy to make financial statements intelligible both to the layman and to the professional accountant, if stock acquired by, or donated to, the issuing company were to be called "stock issued, acquired (or donated), and held in the treasury," or "actual stock held in the treasury."

If stock which has been legally issued and has come back into the treasury is subsequently canceled upon due authorization of an assembly of stockholders, it ceases to be treasury stock; it reduces the liability for outstanding stock, and becomes potential stock precisely like the previous balance (if any) of the unissued authorized capital stock.

Accounting for Treasury Stock

A business concern acquiring its own stock in the open market, either to sell it later at a higher price than was originally obtained therefor, or to avoid the payment of large dividends earned and about to be declared, will in all probability carry treasury stock at par, since its par value is the exact counterpart of the liability therefor, expressed at par. If the price paid has been greater or smaller than par, it may debit or credit the "loss" or the "gain" to the Profit and Loss account, or carry it in a special account, "Premiums and Discounts on Treasury Stock," subject to periodical amortization. The result of such an accounting will be an additional profit or loss for the period during which the stock was purchased, or for a certain number of periods thereafter. But if that additional profit or loss means anything, it means that by "dabbling" in its own capital obligations the company has been benefited or in-

jured to a certain extent. No matter what the financing scheme may have been which suggested the purchase of stock, its purpose should have been accomplished without affecting the income, since the question of reducing the capital stock liability was never at issue. It would undoubtedly be better accounting to accept the view that premiums on capital stock constitute liabilities, while discounts constitute assets, or, at all events, that they represent facts which should be permitted to remain on the books until offset by subsequent transactions. Nor can it be said that such a treatment would not be good financing, since it would compel the supposed gains on discounts to remain in the business, while it would prevent the supposed losses on premiums from being charged to the present stockholders to the possible advantage of future stockholders.

Donation Account

A business concern coming into possession of its own stock through a donation, should carry the stock at par under the term "Treasury Stock," and create a credit account bearing an appropriate name, as, for instance, "Treasury Stock Donation Account," which will remain open so long as all the treasury stock is not disposed of. As sales occur, the treasury stock account should be credited with the par value of the shares sold, and the donation account debited with the discounts and credited with the premiums, if any. If treasury stock is given as a bonus to syndicates underwriting issues of bonds, or to purchasers of bonds or other classes of stock, the par value of the shares so given should be credited to the treasury stock account and debited to the donation account. Thus, when all the treasury stock is disposed of, the balance of the donation account will reflect the exact amount of working capital obtained by the company as a result of the gift, and the question of what to do with the donation account will arise.

If the balance of the donation account is sent to the free surplus, dividends will be declared therefrom and the purpose of the donors will be defeated. If the balance is sent to a separate surplus account so earmarked as to indicate that it is not available for dividends, what will be the nature of that account? It has been suggested that it practically constitutes a reserve susceptible of being transferred to surplus, if required to offset extraordinary losses of a given period or of a succession of periods. This may be "sentimental accounting" but it has no other quality. It fails to respect the purpose of the donation; it jeopardizes the benefits obtained thereby in so far as it makes it possible to declare dividends which will have to be paid out of the additional working capital obtained as a result of a gift made for the welfare of the corporation.

In reality, the donation account measures the extent of the benefit derived by the stockholders present and to come from the benevolent action of one or several of them, and constitutes a capital liability of the corporation similar in every respect to the liability for unextinguished premiums obtained through the sale of stock.

CHAPTER XXVIII

BONDED DEBT

General Considerations

Taken in its broadest sense, the word "debt" means a fixed and certain sum of money due, or owing, by virtue of express agreement. The distinction between "due" and "owing" has been established by a California judge* as follows:

"Standing alone, the word 'debt' is as applicable as well to a sum of money which has been promised at a future day, as to a sum of money now due and payable. If we wish to distinguish between the two, we say of the former that it is a debt owing, and of the latter that it is a debt due. In other words, debts are of two kinds: *solvendum in praesenti*, and *solvendum in futuro*."

The same judge, speaking of the nature of debts, says in the same case: "Whether a claim or demand is a debt or not, is in no respect determined by a reference to the time of payment. A sum of money which is certainly and in all events payable, is a debt, without regard to the fact whether it be payable now, or at a future time. A sum payable upon a contingency, however, is not a debt, or does not become a debt until the contingency has happened."

All debts which are evidenced by securities of a permanent nature and for the payment of which certain property has been pledged, are generally referred to as "funded debt," even though it be true that the term appears

* In People *v.* Arguello, 37 Cal. 524, 525.

to suggest that the payment of the debt is secured beyond peradventure by the periodical appropriation of money. Such an appropriation may or may not exist; if it does not, the term "funded debt" applies just as surely to treasury bonds and stocks, mortgage bonds, collateral trust bonds, equipment certificates, etc., etc., since the debt is to all intents and purposes, funded through the pledge of a particular property which may be converted by sale into cash funds.

In this book, however, it has been deemed advisable to subdivide funded debt as follows:

1. Bonded Debt, i.e., all debts evidenced by bonds.
2. Mortgaged Debt, i.e., all debts evidenced by bonds secured by mortgages on real estate or on chattels.

Bond Issues

Every corporation not restricted by constitutional provisions of its own making or by statute, has the implied power to issue bonds as evidence of indebtedness incurred for money borrowed, property acquired, labor performed, or financial services rendered by others for its benefit.

This corporate privilege is exercised through the vote of the stockholders, or, if the latter have vested part of their rights in the directorate, through proper resolutions by the board of directors.

Bonds are authorized to be issued in denominations best suited to the conditions of the market in which they will be offered for sale. Issues of bonds may be composed of units all maturing at the same date, or of a series of units each series maturing at a different date; in the latter case, the security pledged under the issue as a whole is all the more attractive because the retirement of a particular series usually causes the part of the pledge securing it to revert to other unmatured series.

The mortgage securing the bonds is frequently issued to one or several trustees who hold it for the common good

of the bond purchasers; in many instances the indenture states conditions which must be fulfilled before the trustees are allowed to certify bonds for sale to the public. These provisions are common in modern railroad bonds issued for construction purposes where the trustee can only certify such instalments as cover the completion to date of a stated part of the construction.

Accounting Theories of Bond Issues

The accounting record of the liability incurred under an issue of bonds, depends upon the point of view of the accountant:

1 Considering the potential value of bonds as secured evidences of the indebtedness, and accepting them individually as pro rata representatives of a valuable mortgage, he may give to the unsold part of the issue an asset value derived from its potential pledge value, and, for financial purposes, treat it as an asset.

2. He may hold the opinion that, being executed to the trustee, whether or not subject to his certification, the unsold portion of the proposed issue differs from the sold portion only in the fact that in the latter instance the cash value of the mortgage has been realized, whereas in the former case it has not.

3. Ignoring the borrowing power inherent in the unsold instruments of credit, and refusing to be swayed in his opinion by the argument that whether or not the whole issue is sold the same amount of assets remain pledged, he may rigidly enforce the rule that potentiality does not mean actuality.

Under the first and second hypotheses, the accounting treatment will be the same; the whole authorized issue will

be carried as treasury bonds, and at the same time as a liability. The liability will remain immutable until its maturity, or until premature cancellation of part of the evidence of indebtedness; as to the asset, its nature will change with every successive sale.

Under the third hypothesis, the asset and the liability will be recorded only at such time as the former has been received in cash through sales.

It is evident that either of the above treatments would produce the same impression upon the reader of a balance sheet were it not that, thanks to theorists and philosophizers, the general public has come to give to the term "treasury bonds" the same meaning as is commonly given to "treasury stock." The layman understands treasury bonds to be bonds issued and subsequently reacquired by the issuing company. The objection is only a trivial one, however, since for balance sheet purposes it is always possible to record the status of bonded indebtedness as follows:

First Mortgage 5 per cent Bonds of 1925:		
Authorized	$100,000.00	
Less held in Treasury.....	40,000.00	
Issued and Outstanding...		$60,000.00

Bonds Acquired by Issuing Company

The question of the status of bonds purchased by the issuing company, for sinking fund purposes or for any other purpose, has usually found the accountant quite indifferent. Instinctively, he has felt that it is of bonds as it is of stocks, i.e., neither uncanceled bonds nor uncanceled stocks reduce the liability of the issuing company.

Unquestionably, if the purpose in acquiring the bonds is to hold them for speculative purposes, the liability of the company remains unaffected.

But when we come to consider the status of bonds ac-

quired by the issuing company for the purpose of the sinking fund, we face a much more complicated situation. It is plain that at maturity of the bonds the liability will automatically be reduced by the amount of the par value of bonds held by the trustee of the sinking fund. But it is just as plain that if the par value of the bonds acquired under the sinking fund provisions of the indenture is deducted from the liability, the accounting correlation which should exist between the sinking fund and the expired portion of the life of the bond liability representing the whole issue, will be lost. And yet the bondholders who read the balance sheet have the right to know the status of the sinking fund.

C. S. Ludlam, C. P. A. (N. Y.), writing in the March, 1914 number of the *Journal of Accountancy,* makes a plea for the acceptance of the theory that sinking funds composed of uncanceled bonds of the company responsible for their issue are to be shown as deductions from the liability.

Mr. Ludlam says: "It is appreciated that some of our legal friends will claim that bonds of a mortgagor, of the issue covered by a sinking fund, purchased by the sinking fund trustee and not retired and canceled, will not reduce the obligation of the mortgagor, and that such bonds should be treated as a part of the sinking fund and shown on the balance sheet of a corporation as an asset, and that, contra thereto, the full amount of the bonds, both outstanding and in the sinking fund, should be shown as a liability. It is admitted that there are some legal reasons for this, the chief of which is perhaps the question of legal practice in regard to the burden of proof, but it seems to me that questions of this nature could arise only in cases of receivership or liquidation and would have to be dealt with only under court orders; consequently they would not apply to the ordinary accounting of a going concern. Further, while accountants must be mindful of any and all legal obligations,

and of any legal situation affecting the accounts of the clients, it will be apparent at once to anyone who gives the matter thought, that as an actual fact an individual cannot owe money to himself."

Many people have given thought to bond accounting, and, judging from the rulings of the Interstate Commerce Commission, the commissioners have given to the particular subject of sinking funds all the respectful attention which it deserves. A sinking fund is, after all, an account to which nothing else can happen but to be eventually debited to the liability for the redemption of which it is created. Hence, it is essentially and wholly an item the ultimate disposition of which is deferred until such time as its contra will mature. For this reason public utility corporations must show sinking funds as deferred debit items.

Nobody reading a balance sheet would be led to shrug his shoulders contemptuously at the anomaly presented by a sinking fund which, if examined under a sophistical microscope, would elucidate the fact that it contains evidence of indebtedness of the company to itself. One would simply understand that, no matter what particular asset the sinking fund may contain, it represents an accumulation of future debits to a liability account. As to the accountant, he would naturally, knowing the date of issue and the maturity of the bonds, divide the total liability by the sum of its life in years or in interest periods, or in accounting periods, multiply the result by the number of periods of expired life of the liability, and judge the sinking fund in the light of the ratio that it bears to the liability which it will redeem.

Premiums and Discounts on Bond Sales

When bonds have been sold at par, the recording of the liability therefor consists in expressing it at the same figure as the asset which represents the proceeds of the sale. But when bonds are sold at more, or at less, than par, there has

been obtained an asset greater or smaller than the liability, and we must record the extent of the excess or of the shortage under the name of premiums or discounts on bonds. What to do with these discounts or premiums is one of the most interesting of the problems which the accountant has to solve.

Let us state at once that the universal custom is to credit the premiums and debit the discounts to profit and loss, periodically, during the life of the bonds. But is this correct from a financing as well as from an accounting point of view?

When treating of investments in bonds, we have seen that, according to the tenets of the accountancy of investment, bonds assure to their owners the return of the principal invested, and a periodical effective return of interest which, in the case of bonds purchased at a premium, is smaller than the nominal return; while in the case of bonds purchased at a discount it is greater. We have also seen that, in the case of premiums on bonds the theory which holds that the nominal return is income, is a fallacy, as evidenced by the disastrous effect that it has upon the estate of a remainderman under the provisions of a will directing the executor to invest the principal of the estate in bonds, to pay the interest to a life-tenant and, at his or her death, the principal to the remainderman. We have demonstrated that if the investor must make his income reflect the rate of interest that he expected on his investment, he must amortize or accumulate the cost of the investment to par through the Interest account.

If the purchaser of bonds above par must reduce the cost of his investment by charging his income with the periodical amount to be amortized, why should not the vendor of the bonds amortize the premium which he has received, by crediting, not his Profit and Loss account, but his Interest account? Is it not true that the effect of the premium is to

reduce his interest charges, whereas the effect of the discount which he sustains when the investor obtains a discount, is to increase his interest charges?

To make this plain through an example: If the accounts of the investor show:

INVESTMENT IN BONDS

5% First Mortgage Bonds

Date	Interest			Principal		
	Nominal 5%	Effective 4%	Amortization	Dr.	Cr.	Balance
May 1, 1914....				$52,245.64		
Nov. 1, 1914....	$1,250.00	$1,044.91	$205.09		$205.09	$52,040.55

why should not the accounts of the company show:

FIRST MORTGAGE 5% BONDS, 1914-1928

	1914 May 1 Cash..........$50,000.00

PREMIUM ON FIRST MORTGAGE 5% BONDS, 1914-1928

1914 Nov. 1 Interest on Bonds..$205.09	1914 May 1 Cash...........$2,245.64

INTEREST ON BONDS

1914 Nov. 1 Cash $1,250.00	1914 Nov. 1 Discount $205.09

Premiums as Deductions from Principal

There are two more theories to be considered in connection with the treatment of premiums on bonds: One is to the effect that premiums obtained on bond issues should

be set aside to serve as the nucleus of the sinking fund for the redemption of the principal at maturity; the other states that "the premium must follow the principal," that is to say, must be deducted from the authorized issue.

It will be noted that these two theories are similar in principle; both attempt to provide for the partial redemption of the debt. Logical as both may appear to their advocates, they fail to take into consideration the intimate relation which should exist at all times between the bonded debt and its interest cost.

The careful student of accounting must be impressed with the fact that, whatever the methods of treating premiums and discounts may be, their ultimate result is the same no matter what their intent may have been.

The theory which applies premiums and discounts as additions to, or deductions from, income, allows them to contribute to, or to reduce, the amount of net profits out of which a fund will be created for the redemption of the debt, either through the accumulation of a reserve, a fund out of profits, or both.

The theory which applies premiums and discounts as deductions from, or additions to interest cost, has precisely the same effect, and the same is true of the theories which use premiums either as a sinking fund nucleus or as a partial redemption of the debt.

The great question at issue in all accounting matters is not, however, a question of results, but it is one of illuminative sub-results. It is evident that if we ignore the nominal accounts, and are satisfied to deduct the liabilities from the assets at the end of a period, and compare the result with that of the prior period as elucidated by a similar treatment of the balance sheet, we shall obtain the net profit or loss of the period; and nothing that we could do would change the result. But we have failed to show the causes which have brought about the result; we have also failed to show the

exact status of, and the relation between, the different causes. Lastly, we have failed to mention facts which, if known, and known to be true, would make it possible to pass a comprehensive and accurate judgment upon the operations and the financing of the enterprise.

Hence, throughout our accounting we must remember that figures which are not capable of making any statement of their own, and can only vouch for the accuracy of the final result, are meaningless and worthless.

CHAPTER XXIX

SECURED DEBT——UNSECURED DEBT

SECURED DEBT

Real Estate Mortgages

"In equity, whatever property, real or personal, is capable of an absolute sale, may be the subject of a mortgage."* "A mortgage may be made to cover both real and personal property; and the validity of a mortgage on real estate is not affected by the fact that it also pledges personal property and is recorded in the records of chattel mortgages."† In fact, unless statutes prohibit, a mortgage may be made to cover not only land and buildings, but machinery, and even profits to arise from the operation of the said real and personal properties. In the state of Louisiana, where the Code Napoleon prevails, only "immovable" property can be mortgaged.

Generally speaking, in order that a mortgage given by a going concern may be valid and its provisions enforced, it must have been given for a consideration which, in point of time, may be:

1. Received at the time of the execution of the instrument
2. Receivable at some future time
3. Received at some previous time, subject to conditions which, being unfulfilled, are canceled in consideration of the mortgage

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* Wright *v.* Shumway, 30 Fed. Cases, No. 18,093; 1 Biss. 23-26.
† Long *v.* Cockern, 29 Ill. App. 304.

The consideration itself may be:

1. The receipt of property or of money or its equivalent
2. The granting to the mortgagor of the right to enforce the mortgagee's performance of a contract for future delivery of money when certain conditions are fulfilled by the mortgagor
3. The extension of the time of settlement of claims and accounts outstanding against the mortgagor
4. The surrender by the mortgagee of securities previously pledged to him as a security for a debt of the mortgagor which is to be extended

1. Receipt of Property or Money. If the consideration has been the receipt of property, money, or its equivalent, the accounting procedure necessary to express the transaction on the books of the mortgagor, is to record the asset obtained as well as the liability incurred therefor. No entry of any kind is made in the account recording the value of the asset mortgaged, since the conveyance of it is subject to a claim which defeats it if certain conditions are satisfied.

2. Mortgagor's Right to Enforce Contract. If the consideration has been the granting to the mortgagor of a financial right to be exercised at some future time, upon the fulfilment by him of certain conditions (such as is the case with building loans), the mortgagor may:

a. Record his financial right and, correspondingly, the long-term liability which he has incurred and secured; subsequently, when exercising his right, debit the asset received and correspondingly decrease the right.

b. Omit the recording of the right, and record the asset and the liability only at the time the asset is actually received. Of course, in this case, the amount of the liability recorded is precisely that of the asset received.

3. Extension of Time. If the consideration has been the extension of the time of settlement of claims and accounts outstanding against the mortgagor, it is necessary to make the books reflect the fact that the old debt has been canceled and that a new one, having a longer maturity, has been incurred.

4. Surrender of Securities. If the consideration has been the surrender, by the creditor, of securities pledged to him in exchange for the security of the mortgage, the change in the nature of the liability must be recorded by canceling the pre-existing debt and recording the new one.

Chattel Mortgages

Real estate mortgages convey title to real property: chattel mortgages transfer title to personal property; both do so with a clause of defeasance, that is to say, with a clause to the effect that, if the giver of the security performs his share of the contract, the title reverts to him. It has been repeatedly held by courts of law that the passing of the title under both kinds of mortgages is merely a legal fiction, and that what the mortgagee really receives, is a lien pure and simple.

As to the consideration for chattel mortgages, it has been claimed that any consideration which will support an ordinary contract will also support a chattel mortgage.

The covenants of both the real estate mortgage and the chattel mortgage, if legally enforceable, might accumulate the value of the asset of the mortgagee, or the extent of the debt of the mortgagor. If, for instance, one of the covenants is to the effect that the mortgagor is to pay all legal fees and all other costs, trouble, and expenses, the notice by the mortgagee of the amount expended by him must be recorded by the mortgagor as an increment of the debt, and by the mortgagee as an increase of the asset.

The main accounting difference between real estate and

chattel mortgages is found in the fact that the terms of the former are usually of such duration as to make the debt a capital liability, whereas the terms of the latter, if stated, are usually short, and, if not stated, make the instrument payable on demand.

Interest on Mortgaged Debt

From the point of view of accounting, there is nothing particularly interesting in the debt incurred for interest on mortgages, except that, if not paid when due, it may in all propriety be added to the principal debt.

Secured Debt

The term "secured debt" is used by accountants to denote all liabilities, to secure which an asset has been pledged by transfer to the creditor.

The word "pledge" is used here in its strictly legal sense, as indicating the physical transfer to the creditor of valuable property of the debtor, to be held until settlement by the pledgor, who retains title in the thing pledged.

Debts may be secured by the pledge of bonds, stocks, mortgages receivable, warehouse receipts, or by the pledge of any personal property or evidence of the possession and ownership of such property.

The pledging of bonds, stocks, or other personal property as security for debt, leaves the borrower in legal possession of the pledge, but places the creditor in physical possession thereof. True to the principles of law, the theory of accounts requires that the pledgor record his liability under the loan, in the amount of the asset received, and make no record whatsoever in the account containing the asset pledged by him to secure a more liquid one.

We have already discussed at length the nature of bonds and stocks as assets or as liabilities. Nothing further need be said about them in their capacity as pledges. It may, how-

ever, be interesting to touch upon warehouse receipts, which are so often used by business houses as security for advances from financial institutions.

Warehouse Receipts

A warehouse receipt is an acknowledgment by a warehouseman that he has received and holds in store for the bailor the amount and description of goods named in the receipt.

At common law, warehouse receipts were not negotiable, although they were assignable; but since certain states have enacted statutes concerning these instruments, it must be said that they are governed by the laws of the particular states in which issued.

The Uniform Warehouse Receipts Act (Par. 516) has this to say about this type of commercial paper: "A receipt in which it is stated that the goods received will be delivered to the depositor or to any other specified person is a non-negotiable receipt. A receipt in which it is stated that the goods received will be delivered to the bearer, or to the order of any person named in such receipt, is a negotiable receipt."

The pledging of a warehouse receipt as security for a loan is made valid by the mere delivery of the receipt with the intention to create a pledge. If the pledgor fails to pay his indebtedness at the appointed time, the pledgee may sell the property represented by the receipt, after having notified the pledgor of his intention to do so.

UNSECURED DEBT

Notes and Bills Payable

The status of promissory notes payable cannot be ascertained without a thorough knowledge of the law of commercial paper; the same is true of the liability account "Bills Payable."

It is unquestionably true that the average keeper of accounts, after drawing a postdated check, will generally credit cash and debit the creditor's account, precisely as if the check bore the date when drawn. Still, under the doctrine of the laws of commercial paper, a postdated check is a negotiable bill of exchange, payable on demand after the day of its date; and further, the acceptor of the check accepts it precisely as he would a bill of exchange; hence, the recording of a postdated check for the payment of a liability fails to cancel the liability; it merely transforms it into another, and the entry should be:

Creditor

To Bills Payable

As has been said before when treating of assets, the general term "notes and bills" should be kept in separate accounts.

Bills Payable

The signature of the drawer of a bill of exchange is of itself a guarantee to the payee that the drawee has sufficient funds to meet the bill; it is also an implied guarantee that the drawee will accept the instrument and pay it at its maturity, or that, in the case of default by the drawee, the drawer will pay the bill.

If, then, the drawee has funds of the drawer, the former must, upon acceptance of the instrument, debit the drawer and credit the account "Accepted Bills Payable"; the drawer, on the other hand, must credit the drawee and debit the payee. If, in contradistinction, the drawee has no funds of the drawer, the latter must debit the payee and credit the drawee, whereas the drawee must debit the drawer and record the liability incurred by him for the account of his correspondent

If the drawee refuses to accept the bill, the drawer becomes liable; that is to say, instead of having realized an

asset and applied it to the liquidation of a debt, he has merely changed the nature of his indebtedness towards the payee. Hence, he must reverse the entry previously made and record the change in the nature of the liability.

The liability of the drawee, under the terms of a bill of exchange, begins only upon his acceptance of the instrument, and should be recorded only at that time, whereas the liability of the drawer, or maker, ceases upon acceptance by the drawee, and should be canceled at that time, there remaining only a contingent liability.

Memorandum Checks

Germane to the subject of bills of exchange, is that of memorandum checks. When it is desired to acknowledge a debt in a formal financial way, a check is sometimes drawn in the amount of the debt, bearing the date of maturity of the liability, and the word "Memorandum" written across its face. Such a check is not intended for immediate presentation, and is in fact a bill of exchange payable on demand after its maturity. Of course, if the check is not postdated, the fact that it bears the word "Memorandum" does not prejudice the right of the payee to present it immediately.

The execution of a postdated memorandum check calls for no special accounting record if the original debt has been recorded in the usual manner through the creditor's account. In the contrary case, the credit may be given to the account "Bills Payable."

Promissory Notes Payable

While the liability of the drawer of a bill of exchange is secondary, that of the maker of a promissory note remains primary; or, what is more to the point, if the note is not negotiable, the nature of the liability of the maker towards the payee has not changed in the slightest degree. Consequently, the transaction in virtue of which a non-negotiable

promissory note has been issued to a creditor, requires no recording if the maker of the instrument considers only its legal status. In the case of a negotiable instrument it is customary to cancel the original debt for which the note is issued, and to record the new debt in the account "Notes Payable."

CHAPTER XXX

ACCOUNTS PAYABLE—DIVIDENDS PAYABLE

Accounts Payable Records

Theoretically, the term "accounts payable" is a balance sheet term. When found in that financial statement, it may include:

1. The credit balances of the accounts of creditors
2. The amount of expense bills received at the end of a period, and not paid as at the date of the balance sheet
3. The balances due to officers or employees of the concern on credit accounts which they were permitted to accumulate for any purpose whatsoever
4. Unsettled claims against the concern from whatever sources they may originate
5. Taxes, rentals, interest, due and unpaid at the time of the statement, etc., etc.

Inasmuch as the purpose of a balance sheet is to show the financial status of an enterprise at some given date, it does not particularly matter whether or not unsecured indebtedness is so analyzed as to show its sundry elements. But while the balance sheet may be permitted to speak in general terms, the books of account must be in a position to supply at all times the most minute information concerning financial facts. Hence, the general ledger should not be satisfied to gather in one account all the possibilities of unsecured accounts or claims to be paid; it should express every

component individually. It ought to be possible to obtain from the ledger the exact significance of the classes of indebtedness which have been incurred during the accounting period and remain unpaid at the end.

That this principle of ever-ready analysis constitutes one of the vital desiderata of business, is evidenced by the care with which accountants have built up the voucher register, which supports in admirable detail the one ledger account expressive of all outstanding claims and accounts, i.e., "Audited Vouchers Unpaid." The voucher register, it must be remembered, does not intend to supplant any particular book, or to merge two or more books into one; it merely intends to analyze for the general ledger, and to present in ever-ready and concise form the analysis of, the liability account "Accounts Payable," or "Audited Vouchers Unpaid."

The ledger account "Audited Vouchers Unpaid" is not intended to contain the liability for salaries and wages accrued and unpaid because not yet payable; it has nothing to do with accruals. It may, however, properly contain the unsettled claims for salaries and wages which, having been properly audited and recorded in the pay-roll book or on the departmental salary voucher sheets, have, for some reason or another, remained unpaid. The account "Audited Vouchers Unpaid" is made to reflect these facts by a periodical journal entry debiting the account "Salaries and Wages Accrued," and crediting the matured liability account.

Dividends Declared and Unpaid

"A dividend is that portion of the profits and surplus funds of the corporation which has been actually set apart by a resolution of the board of directors, or by the shareholders at a corporate meeting, for distribution among the shareholders according to their respective interests, in such a sense as to become segregated from the property of the cor-

poration, and to become the property of the stockholders distributively."[1]

It must be carefully noted that only dividends declared make the stockholders individual creditors of the corporation, and that holders of preferred and guaranteed shares of stock are not *de facto* creditors in the event that dividends which they had the right to expect, were not declared by the directors.

It has been stated repeatedly that dividends declared and unpaid constitute a trust fund in the hands of the directors for the benefit of the stockholders, and cannot be disposed of otherwise than as intended, without the absolute and formal consent of those entitled thereto. On the other hand, it is true that in a famous Alabama case[2] it was held that, in the event of insolvency of a corporation, dividends unpaid became an asset of the corporation to be applied for the benefit of outside creditors; but such a legal doctrine is so entirely subversive of the care with which laws in general have guarded the interests of stockholders, that it may be challenged without fear or scruples. Indeed, in the State of New York it has been held that the receiver of a corporation whose books show dividends declared and unpaid, cannot regard these dividends as a common debt, but must consider them as trust funds vested with a lien in favor of the stockholders.[3]

The sanctity of the dividend as a true, just, and uncancelable debt of the corporation has been proclaimed emphatically in North Carolina where the State attempted in vain to appropriate unpaid dividends of the North Carolina Railroad Company for the benefit of the State University.

When dividends have been declared, and made payable at some future time, they can be rescinded only in the event that no knowledge of the declaration has transpired outside

[1] Cyclopedia of Law and Procedure, Vol. X, 546.
[2] Curry *v.* Woodward, 44 Ala. 305.
[3] Matter of Le Blanc, 4 Abb. N. C. (N.Y.) 221.

of the board room. This, however, does not hold good if it is found that, instead of being declared out of the profits, dividends have actually been declared out of capital.

If the dividends have been declared and paid illegally, it is also possible for the corporation to recover them from the stockholders if the latter knew that they were actually receiving part of their capital to the prejudice of creditors of the corporation; but it is not possible to recover such dividends in the case where the stockholders were ignorant of conditions and received the dividends in good faith.[1]

What has been said in the foregoing applies only to the dividends declared by a going concern. The dividends of a liquidating concern are nothing more than the pro rata division of whatever is left of the assets after all the claims have been paid.

The law of New York, which in this respect is typical of the laws of the other states, provides that dividends can only be declared out of surplus profits earned. In a California case it was held that dividends cannot be declared out of earnings which represent interest accrued and not as yet receivable, even though it is certain that such interest will be received.[2] But it would seem that such a ruling is at loggerheads with the principles of accounting and with the rulings of the Internal Revenue Department of the Federal Government as to what constitutes income.

Profits Available for Dividends

What constitutes "profits and surplus" available for the declaration of dividends, will always remain one of the interesting topics of the science of accounting. Courts of law have ruled that it is perfectly proper to declare dividends out of profits inflated by the increase of the market value of assets unsold. In a decision by Justice Greenbaum[3] the

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[1] McDonald *v.* Williams, 174 U. S. 397; 19 S. Ct. 743; 43 L. Ed. 1002.
[2] People *v.* San Francisco Sav. Union, 72 Cal. 199; 13 Pac. 498.
[3] N. Y. Supreme Ct.; Reported in *N. Y. Law Journal*, April 2, 1914.

court said: "A corporation has a very wide discretion in determining when a dividend shall be made. There might be a difference of opinion in a given case as to the wisdom of accumulating a large surplus which otherwise would be applicable to the payment of dividends, but that would not be a subject for legal interference where the discretion is fairly exercised. If the defendant corporation has the right to accumulate a surplus, it has the right to invest the surplus in securities, and if the securities appreciate in value, there is no reason why the profits arising from the investment should not be regarded as the profits of the business of the corporation."

The language of the courts is quite clear as to the ultimate disposition of increased value of securities acquired out of surplus. It remains to be seen, however, whether or not it is proper to pay dividends out of "profits" obtained by adding to capital assets of a physical nature, acquired to be used for the operating purposes of the business, favorable market fluctuations which cannot be realized in cash, since the assets are not for sale, nay, cannot be sold without bringing operations to a stop or to an end.

It is quite conceivable that, in order to swell the surplus to a figure which will secure for it a respectable appearance after the declaration of dividends out of profits actually realized, favorable fluctuations in the market value of fixed assets acquired out of capital contributions, may be considered. We say that it is conceivable, because of the well-known tendency of investors to consider the surplus of corporations as the most attractive item on their balance sheet, irrespective of the actuality and accuracy of the assets, the supposed value of which is exhibited by the financial statement. But to declare and pay a cash dividend out of such fluctuations when it is possible that at the time the assets are sold their value will be considerably less than is shown by the books, appears to be nothing more than paying dividends

out of anticipated profits. This is said with full knowledge of the fact that decisions may be found upholding the legality of such dividends.

If it is really desired to give to the stockholders the benefit of increased market value of capital assets, it would be infinitely better to declare and pay a stock dividend. In that case, if profits eventually turned out to be losses, the deficiency in assets to be distributed could be charged to the capital stock issued under the form of dividends.

Dividends from Income—from Increased Valuations

That there is a marked distinction between dividends declared out of income and profits obtained from the actual financial transactions of a concern examined from the viewpoint of operations, and dividends declared out of profits obtained from the increment of invested values, is evidenced by the fact that in differentiating between "corpus" and "income," in matters affecting life-tenants and remaindermen, courts have generally decided that:

1. Dividends, whether paid in cash or in stock, declared out of income and profits, are income and belong to the life-tenant.
2. Dividends, whether paid in cash or in stock, declared out of profits due to increased valuations, are principal and belong to the remaindermen.

As an accounting proposition, proper differentiation should be had between the components of the surplus before declaration of dividends, in every instance where the capital stock of the concern is composed of preferred stock receiving a stated amount of dividends, and of common stock receiving, if advisable, the balance of the profits. If the profits are made up of operating profits on the one hand, and of profits due to the sale of invested capital on the other hand, accounting principles would seem to require that, when about

to pay dividends, the surplus be divided into two distinct parts:

1. The portion which represents operating earnings
2. The portion which represents increments of capital

and that, the preferred stock having received its portion of the operating profits, and the common stock the balance, the surplus component representing increments of capital be distributed pro rata to both classes of stock in the ratio that the preferred stock bears to the common stock.

This is precisely the view taken by the legal and accounting advisers of the Equitable Life Assurance Society of the United States in the matter of an extra dividend of $80,000,000 declared in January, 1914, by the Union Pacific Railroad Company, whose preferred stock was held in part by the Life Assurance Society. The surplus out of which this dividend was declared, was made up in part of approximately $59,000,000 representing profits on sales of securities of affiliated and controlled companies, and approximately $15,000,000 gained in the conversion of convertible bonds into common stock on the basis of $175 of bonds for each $100 of stock. In deciding against the Assurance Society, Justice Greenbaum of the Supreme Court appears to have been influenced:

1. By the terms of the preferred stock issue which stated: "Such preferred stock shall be entitled in preference and priority over the common stock to dividends in each and every fiscal year, at such rate, not exceeding 4% per annum, payable *out of net profits,* as shall be declared by the board of directors. Such dividends are to be non-cumulative and the preferred stock is entitled to no other or further share of its profits."
2. By the decision in the case of William *v.* Western Union Tel. Co. (93 N. Y. 162, 168) to the effect

> that the capital stock of a corporation is the capital or property contributed by the stockholders to the extent required by its charter, and that "whatever property it has up to that limit must be regarded as its capital stock" and that any amount of property over that limit is surplus profits.

Of course the ruling of the learned justice is the law in the case and will remain the law until reversed; but accountants may still be found who believe that the contention of the Equitable Life Assurance Society was remarkably true to principles of accounting, and exhibited the shortcomings of preferred stock for the benefit of future investors.

Dividends declared on capital stock belong to the stockholders of record on the day the corporate books are closed, and the right to them passes to subsequent purchasers of the stock only upon mutual agreement between the interested parties. This is particularly interesting because it is not infrequent to find among business men the belief that "option" sales of shares of stock convey to the buyer of the option the right to dividends declared on the shares between the initial and the closing date of the option.

Stock Dividends

Stock dividends may be declared in lieu of cash dividends, or as a result of the receipt of property by donation, gift, etc., or under the form of increments in value over the amount paid therefor. In the first instance the term "stock dividend" is a misnomer; it should be "dividends paid in stock."

Accounting Treatment of Dividends

In many European countries dividends are declared by the stockholders at their annual meeting. Having accepted the financial statements as submitted by the directors, they

vote that a certain portion of the annual profits be set aside for reserves, that another portion be distributed to those entitled thereto, and that the remainder, if any, be transferred to surplus. If there are not sufficient profits from the year's operations for the declaration of the desired dividend, the surplus is drawn upon, the required amount being sent to the profit and loss, out of which all regular dividends are paid. Extra dividends are paid out of surplus.

It is safe to say that in America the majority of the corporations send the annual or the semiannual balance of net unappropriated profits to the surplus, and declare dividends out of that account. The journal entry giving expression on the financial books to the declaration of dividends is:

Surplus (or Profit and Loss, if the occasion arises)	$.	
To Dividends Payable No. . . .		$. . . . . .

It is customary to number the dividends, giving a different series of numbers to the different classes of stock.

Unpaid portions of dividends declared must remain a liability of the corporation until claimed; and if it has become certain that they never will be claimed, they can only return to surplus by decision of the board of directors.

CHAPTER XXXI

ACCRUED LIABILITIES—DEFERRED CREDIT ITEMS

Accrued Liabilities

Liabilities accrued, but not due, are recorded in order that the income charges which they represent may be made to apply to the period in which they originated. The advisability of entering such charges at the end of a period is largely dependent on the requirements of the financial statements to be obtained at the time. If a true financial condition is to be exhibited, all accrued income charges must be included in the statements, as well as all accrued income benefits, or credits.

What the accrued liabilities will contain, depends essentially upon the business conducted and upon the type of organization. The inclusion of taxes in this group of liabilities is due to the fact that, unless the theory of accruals is accepted and applied to the accounting of an enterprise, taxes are recorded when paid, and do not appear as a liability at any time.

The date at which the liability for taxes arises, depends of necessity upon the provisions of the statutes regulating the imposition of taxes by the different subdivisions of the body politic. Generally speaking, however, an individual is liable for taxes on whatever taxable property he possesses on the day fixed for the completion of the tax list, and, while agreements between parties transferring the liability for taxes from one to the other may be valid as be-

tween them, such agreements do not relieve the original party of his liability for its payment.

Taxes, Licenses, Assessments, and Fees

Taxes are contributions imposed by the body politic upon its citizens, for its support and their protection.

License fees are taxes imposed on the right to conduct a certain business. In most states they are imposed on such businesses as require special inspection, control, or regulation.

Assessments are charges made against property owners benefited by improvements made to public property, to defray the cost of the said improvements. Thus assessments partake of the nature of a consideration for the enhanced value of the property by reason of the improvements made.

Fees include all amounts paid to public officers for services rendered.

Classification of Taxes

Taxes are divided into direct and indirect. Direct taxes are imposed upon the individual with the intention that he shall pay them and bear the burden of them himself. Indirect taxes are those imposed upon property in such wise that they can be added to the price and so passed on to somebody else. More specifically, taxes may be classified as:

1. Federal Taxes
2. State Taxes
3. Municipal Taxes

Taxes are further subdivided as:

1. Business and Occupation Taxes
2. Property Taxes
3. Excise Taxes
4. Inheritance Taxes

1. Business Taxes

The term "business taxes" includes all taxes which cannot be strictly construed as taxes on property, excise taxes, or inheritance taxes; they are, for instance:

a. Taxes upon the premium receipts of insurance companies

b. Taxes upon the gross receipts of railroad companies

c. Taxes on savings banks according to their deposits

"Occupation taxes" are in the nature of licenses to conduct business, rather than taxation, in a strict sense of the term.

2. Property Taxes

Property taxes are subdivided into:

a. Taxes on real property and interest thereon

b. Taxes on personal property

a. Taxable real property includes, generally speaking, whatever the individual state laws have classified as real, such as land and buildings and their appurtenances and improvements; machinery and fixtures which are attached to the buildings in such a manner as to be part of them under the meaning of the law; mines, minerals, and even mining rights; riparian and water rights; bridges and wharves.

b. Taxable personal property includes: money in the possession of the individual, or receivable by him at the time of the assessment; traders' and manufacturers' stock in trade; boats and vessels; loans and investments of money; debts due to residents by non-residents; annuities; franchises, etc.

3. Excise Taxes

These taxes are levied on particular classes of goods, or commodities; the term commodities has been said by eminent jurists to include corporate franchises, transfers

of shares of stock, and the giving of trading stamps in connection with a sale of merchandise, giving right to goods other than the goods sold.

4. Inheritance Taxes

These taxes are imposed upon the privilege of acquiring property by inheritance, legacy, or succession; they are levied in accordance with the provisions of the laws of the individual states. The rate of the tax and the particular properties which will be deemed taxable, are also matters of state legislation.

Deferred Credit Items

To the average concern, the items included in this class of financial facts are not liabilities; they are merely (1) benefits received during a certain period and applicable to a subsequent one, as for instance:

a. Unextinguished discounts on securities acquired
b. Unextinguished premiums on securities issued
c. Unearned portion of fees received in advance of the rendering of services

or (2) aggregations of credits measuring the amount of cash receipts for the distribution of which sufficient information is lacking.

It requires no great effort of imagination to realize that:

1. Discounts obtained on securities purchased or premiums realized on securities issued could have been applied to the profits of the period in which the purchase took place, and that it is only the desire to make a series of periods receive the benefit of the gain, which indicates the deferring of the application.

2. Unearned portions of fees received in advance of the rendering of services, while, no doubt, giving rise to a liability for work which may, or may not, entail expense, do not represent a financial liability as we understand the term. Here, again, it is only the desire of being conservative and true to accounting principles which has demanded that the application of the fees to the income be deferred until such time as the work is done.
3. The lack of sufficient knowledge to properly credit the account which brought in cash, does not give rise to a liability, but merely defers the time when the name of the outgoing value will be known.

The rulings of the Interstate Commerce Commission have greatly extended the meaning of the term "deferred credit items" so far, at least, as public service corporations are concerned. This class of facts has been made to include, not only benefits applicable to subsequent periods, unearned portions of income, and credit balances of suspense accounts, but, as well, operating reserves, and liabilities on account of provident, pension, savings, relief, and hospital funds, whether contributed by employees, or by the company, or by both, wherever such funds are managed by trustees for the company.

While, at first glance, it may appear odd to include operating reserves among deferred credit items, it will be seen, when the nature of such reserves is investigated, that the only thing which may happen to them is to be paid out when the loss for which they provide has materialized. And since the entry giving expression to the payment of the reserve will be:

Dr. Reserve — Cr. Cash

it must be readily seen that what is actually deferred is the time when cash will actually go out to pay the loss.

Operating reserves are created by charging operations for overcharges to passengers or shippers, and for injuries and claims of similar nature, which, while as yet not positively determinable, are bound to occur in an amount which experience has established, within a series of periods. The reason for spreading the losses with some sort of equality over a series of periods instead of taking cognizance of them only when they materialize, is to be found in the accounting conviction that unless this is done, comparisons between the individual periods of a series will be unfair. It is for the very same reason that all accruals are so often recorded monthly.

The reason for the inclusion of the liability for pension, hospital benefit, and other similar funds is to be found elsewhere. The Interstate Commerce Commission has so classified the balance sheet of public service corporations engaged in the interstate traffic that it is possible to oppose:

Capital	Assets	to	Capital	Liabilities
Working	Assets	to	Working	Liabilities
Accrued	Assets	to	Accrued	Liabilities

Any asset or liability which does not fit this classification is of practically no importance so far as the operations of the property are concerned; the assets represent nothing available for current purposes; the liabilities represent nothing which has to be met for current purposes. On the other hand, there is an item, "Hospital Fund," the application of which is deferred, while opposed to it there is a liability the payment of which, out of a fund with a deferred application, is postponed until the claim is made.

CHAPTER XXXII

RESERVES AND SURPLUS—PROPRIETORSHIP ACCOUNTS

RESERVES AND SURPLUS

Distinction Between Reserves and Surplus

Reserves and surplus not appropriated, together measure the profits made by the corporate enterprise and as yet undistributed. As such they constitute the increments of its capital not represented by shares of stock, and not expressible in shares of stock except through the declaration of a stock dividend.

The only real difference between reserves and surplus is that the former are that part of the surplus earnings which has been set aside to provide for losses which may or may not materialize; whereas the latter is that part of the surplus earnings which has been allowed to accumulate for distribution among the stockholders in the form of dividends, or for such other disposition as may seem desirable.

The foregoing applies neither to operating reserves nor to reserves for depreciation created by charges to cost of operations or to cost of goods manufactured; nor again, to secret reserves. Still, it might be, and has been argued that by reducing the profit through charges to income, these reserves come out of surplus just as effectively as if they had been appropriated out of it. The truth or fallacy of this argument will become apparent when we have classified reserves and analyzed the different classes.

Classification of Reserves

Reserves are classified as follows:

1. Reserves for Depreciation. Reserves representing actual losses of capital through operations, charged to operations or to manufacturing cost of goods, and temporarily withheld from the asset account which they would reduce if applied to it.

2. Operating Reserves. Reserves representing charges to operations for losses which have not yet materialized but will positively materialize.

3. Reserves for Surplus Contingencies. Reserves representing appropriations of surplus for losses that may or may not materialize; such reserves are:
   a. Invested in a special fund, or
   b. Not specifically invested, but contained in the general fund constituting the gross assets.

4. Reserves for Redemption of Debt. Reserves representing appropriations of profits, intended to reduce the amount of profits available for distribution, in order that the amount so appropriated may be compelled to remain invested in the business until it is time to apply it to the redemption of debts. These reserves may be:
   a. Specifically invested in properly earmarked redemption funds, or
   b. Not specifically invested.

5. Secret Reserves. Created by:
   a. Reducing the cost or book value of certain assets beyond the limits of the probable or the possible, or
   b. Reducing both assets and profits by deducting from the cost of investments the income which they produce, or

c. Applying specific or general contingency reserves to the reduction of assets with which they are not related.
6. Reserves for Exhaustion of Physical Assets.

Before proceeding further, it must be understood that the fact that an account is called "Reserve" does not necessarily give it the right to masquerade under that title. The liability recorded for taxes accrued can no more be called a "reserve for taxes" than the credit offsetting a debit to an asset for increase of market value can be called a "reserve for appreciation" of that asset. Nor can the term be applied to a deferred credit item such as "unearned consulting fees" or "unearned title fees."

Having classified reserves, each class must be analyzed, and both its purpose and the principles which is applies be ascertained.

1. Reserves for Depreciation

Depreciation is composed of two distinct elements:

a. The irreparable loss suffered by the physical unit through:
   (1) Wear and tear caused by operations
   (2) Accidents
   (3) Efflux of time
   (4) Mere exposure to the elements

b. Obsolescence of the type

Whenever, through operation or accidental causes, a physical unit has sustained a loss of efficiency incapable of being restored by adequate repairs, there is supposed to remain an element of loss which, intangible as it may be, has partially consumed the capital invested in the unit; and as years go by, the succession of injuries to the unit reduce it to a level of efficiency so low as to make the asset of very little value from a practical standpoint. Thus, elements 1,

2, and 3 are so closely related, and so undeniably associated with operations, that it has been deemed quite proper to charge the depreciation loss which they indicate, to the cost of the goods manufactured, or, if the concern is not manufacturing, to the cost of conducting the enterprise.

As to the loss due to exposure to the elements, it may properly be argued that it has little, if anything, to do with operations. It is, besides, so difficult to estimate properly the loss sustained, that it would seem impossible to provide for it otherwise than by application of surplus, subject to adjustments whenever the exact truth becomes known.

Obsolescence of type represents a loss only when known. Provision for this loss far ahead of its materialization is one of the many precautions dictated by conservatism, which must be reckoned with. But it is a complete denial of its purpose, to treat it indifferently, and sink it, merged with other elements of depreciation, in the cost of operations. If there is ever a good reason for creating a specific reserve out of net profits, that reason is presented by the possible obsolescence of physical units. It may be feared that a specially made machine will be rendered useless within a year or two or five years, by the invention of a better and more economical machine; but the expected loss may never come, or may be postponed for many years. Hence, logic would indicate a special treatment for a special condition.

It has, unhappily, become the usual practice to consider the term "depreciation" as a convenient invention for assimilating antagonistic factors; charges made to operations under the title of "depreciation" often contain, if the truth were known, provisions for unknown quantities, the ultimate result being the perversion of accounting truth. The main trouble with such unscientific accounting is that it works at cross purposes with the legitimate, although idealistic, aspirations of cost finding. It denies that an accounting statement of facts should be truly analytical, and should at

all times "split hairs," if necessary, in order that conclusions to be made from figures submitted, may be minutely accurate instead of superficially just.

Coming back to accounting principles, if depreciation, in the accepted sense of the term today, is charged to cost of operations, it cannot be denied that it represents a genuine loss through such operations. Hence, the creation of a reserve for this loss is tantamount to merely deferring the time when the loss will be credited to the asset which has sustained it. As a consequence, a reserve for depreciation created in this fashion is not, and cannot be said to be, appropriated surplus; it cannot be shown on the liability side of the balance sheet, but must be deducted from the asset in order that the true remainder value of the asset may be stated. We will discuss later the different methods of providing for depreciation.

2. Operating Reserves

Operating reserves are not appropriations of surplus; they measure the amount of all additional cost of operations which, while not necessarily incurred at the present time, will positively be incurred if past experience counts for anything; they represent cost incurred and unpaid, and the only connection that they can possibly have with surplus is that, if unnecessarily high, they will be sent in part to the credit of that account, in order to remove any prejudice that it has suffered through over-conservatism. But, until they are found untrue they are supposed to represent true cost, and cannot be stated otherwise than as items the ultimate disposition of which is deferred.

3. Reserves for Surplus Contingencies

When closing the books for the purpose of ascertaining the surplus profits of a period, it is customary to take as profits the net fluctuations of assets, representing the amount

by which incoming values have exceeded the outgoing values. Thus, the increase of incoming claims upon customers, over the cost of outgoing merchandise, is taken as the gross profit. But it may happen that in the following period, accounts receivable may be lost through the failure, the lack of good faith, or the financial embarrassment of one or more customers. The account being lost, it remains to charge it to accumulated profits, under the form of surplus adjustment, in the amount of:

a. The capital lost
b. Profit taken as such during the prior period, and lost during the present one

But, since losses of accounts receivable are likely to be sustained, it is advisable at the end of any given period to provide for them by appropriating enough of the very profits which the account brought about; which reserve must contain not only its quota of the profits which may be lost, but, as well, its quota of the capital which is likely to vanish.

All reserves for surplus contingencies, to be truly reserves, must provide either for possible losses of capital, or for possible losses of accumulated surplus. If they are for contingencies of an unknown nature, as, for instance, a sort of insurance against problematic financial happenings, they are not truly reserves; they are surplus temporarily debarred from dividend distribution..

4. Reserves for Redemption of Debt

It is a well-established principle of finance that debts incurred to obtain at once a large amount of capital required for improvements or additions which will increase earning power, should be repaid out of profits.

If, for instance, an individual borrows $20,000 to estab-

lish a stage line between two towns, it must be that he has in view:

a. To obtain the necessary equipment out of money which he does not own, and which represents the wealth of somebody else

b. To obtain out of that equipment an income which his business acumen tells him will be large enough to:

    (1) Meet the charges for interest which the lender of the capital will make.

    (2) Give him, the borrower, enough of a remainder to:

        (a) Live from the fruit of his industry

        (b) Maintain the property acquired out of the money borrowed

        (c) Provide for the natural exhaustion of the property

        (d) Repay the original debt

If he has, perhaps, been able to persuade the lender to accept the equipment in payment of the debt at maturity, he must have in mind to set aside annually out of his income, enough money to either pay the loan or supply him with the capital necessary to acquire new equipment. If neither of these two propositions fits in with his purpose, he will, at maturity of the debt, lose both the equipment and the income.

If a railroad company possessing a one-track line, and believing that a two-track line will double its income, borrows enough money to proceed immediately with the improvement, instead of proceeding gradually by reinvesting in property the profits obtained from the original investment, it must be that it intends to repay the debt out of profits. If this is not the case, how will the debt be repaid? Through the sacrifice of the assets originally obtained out of contributions of capital? By giving back that part of the capital

assets obtained out of the debt incurred? If the former method is adopted, what sense was there in the exchange? If the latter, what sense was there in borrowing? The bondholders must expect their bonds to be paid out of profits and not out of the very capital which their money has purchased, since that capital is pledged to them as security; they cannot expect to be paid out of the capital acquired through antecedent liabilities incurred, since that capital is pledged to others.

Hence, reserves for the redemption of debts must be created out of profits. It is evident, however, that if sufficient profits are not reserved and so earmarked that it will be at all times possible to identify them, their purpose may fail; if they remain in the free surplus they may be distributed as dividends, and there will be left to pay the debt nothing but the pledge more or less depreciated, the sale of which will deprive the borrower of the very asset for the acquisition of which he contracted a liability.

Since reserves for redemption of debts must be created out of profits, it is possible:

a. To appropriate surplus earnings as measured by the Surplus account, or by the periodical profit and loss. This appropriation prevents the distribution, under the form of dividends, of assets representing reinvested profits.

b. To set aside the assets themselves by taking them out of the general fund of assets, and assigning them to a sinking or redemption fund.

In the former case we have a reserve for the redemption of a debt; in the latter case we have a sinking or a redemption fund. Either of these two methods is adequate of itself; if the two are used in conjunction, no particular purpose is accomplished, but scrupulous conservatism is satisfied.

5. Secret Reserves

This accounting term has been made to cover a multitude of sins; whenever objection is taken to pessimistic writing off of invested values, or to disproportionate charges for depreciation, or again to charges to operations or revenue, for capital expenditures which should have been applied to the increase of assets, the answer is, "Secret Reserves." A manufacturer of prominence in the City of New York once stated to the writer, in a tone indicative of deep-rooted pride, that his capital assets had been "bodily knocked down into the pit of secret reserves," and that their book value, as it stood at the time, was preposterous. Since the said manufacturer was the president of a corporation, the questions at issue were: Did he want to deceive the stockholders, the government, the public, or himself? Did he wish to submit to the directors, the stockholders, the banks, and the public, financial statements with a mental footnote to the effect that things were not in truth what they showed on their face? And if he took the ground that it is well to hide your wealth from some people, did he believe that anyone capable of reading balance sheets is not in a position to follow accounting facts from year to year, and to point out fluctuations in wealth not supported by the statement of income submitted, and thus unearth secret reserves?

6. Reserves for Exhaustion of Physical Assets

Certain physical assets contribute directly to the production of wealth, and others, indirectly. In the former group we find, mines, timber lands, etc., and in the latter group, plant, machinery, tools, etc. The second group depreciates in value through wear and tear; while the first becomes gradually exhausted as it yields its wealth.

Since it is undeniable that the extraction of a ton of ore has exhausted the mine in the amount of the cost of that ton, it is evident that the investors must be made to realize

that all returns to them in the form of dividends contain, besides a share of profits, a partial repayment of capital; unless there has been appropriated out of the profits realized on the sale of the ore, enough to provide for the repayment of the capital when the physical assets are exhausted.

The foregoing principles apply equally as well to the exhaustion of timber lands and of any other wealth-producing physical asset the life of which is dependent upon its exploitation.

Creation of Reserves

As suggested in the foregoing, reserves taken as a class of items, are created by charges to cost of operations, to net profits of the present period, or to accumulated profits of prior periods, and by corresponding credits to individual reserve accounts, or to classes of reserves; but the provision which they attempt to make for losses of assets is just as effectively made by crediting the physical assets, whenever the loss is so positive as to be taken as cost of operations. In such cases, if a reserve is set up, it is only because of a desire to leave the original cost of the asset undistributed on one side of the scale, and to place on the other side a counterweight, establishing the difference between the two.

Provision for Depreciation

To provide for depreciation of physical assets so that they may be gradually brought down to zero, or to their residual value, several methods are available:

1. If the credit is to be given to the asset:

a. Divide the amount to be written down into equal sums, each representing the loss sustained in each successive period of the life of the asset, and provide for each such sum in due time.

b. Write off periodically a sum representing a fixed per cent of the residual value of the asset at the beginning of that period.

c. Debit the asset periodically (and credit income) with the interest, at an agreed rate, on the amount of the capital invested in the asset at the beginning of the period, and write off periodically the proper instalment of an annuity so calculated as to decrease the asset to zero, or to its residual value at the end of its effective life.

d. Revalue the asset at the end of each period, and write off the periodic decrease in value.

2. If the credit is to be given to a reserve account, the methods are precisely the same with the exception that method "b" can be operated only by obtaining the residual cost by means of periodically comparing the amount of the reserve with the original cost of the asset.

The comparative value of the above methods need not be discussed at length. They all aim at the equalization of profits by making each successive operating period bear its share of the loss of capital assets. It must be stated, however, that under the requirements of the Interstate Commerce Commission the corporations subject to its accounting control use the first, that is to say, the simplest, method. Mr. Hatfield* states that the second method "involves a complicated mathematical calculation, and the annual rate of depreciation gives little indication to the ordinary man of the period required to write off the asset. Furthermore, it increases the depreciation charge in the earlier years, and in the case of a new concern this may be distasteful as being an additional charge against profits at a time when business has not come into full swing, and profits are low."

The third method must be especially distasteful to ac-

* "Modern Accounting," page 130.

countants who do not believe that interest on invested capital can ever be a charge either to operations or to assets, or a credit to income or profits.

The fourth method would appear to offer the ideal solution of a difficult problem if it were not that it is impracticable so far as the average enterprise of any size is concerned. Also, this method is open to the objection that, while an appraisement at the end of, say, the twentieth year might show the asset to have a relatively large salable value, its real value to the enterprise, so far as efficiency is concerned, might be insignificant.

Provision for Exhaustion

The method of estimating the provision to be made for the exhaustion of mines, is a little simpler in theory than the creation of reserves, but a great deal more complicated in actual practice.

Theoretically, it is plain that, while the lifting to the surface of a ton of ore has exhausted the vein to the benefit of the storeroom or the ore pile, it is only the sale of that ton which depletes the wealth of the mine. Hence, it seems that, if provision is made for the exhaustion of the property, it should be made only on the basis of the tonnage sold. As to the amount to be set aside out of the profits on each ton, it should be such as to amount eventually, together with the residual value of such other assets as were acquired out of capital contributions, to the amount of the paid-up capital.

PROPRIETORSHIP ACCOUNTS

Positive and Negative Components

The sum of the assets, less the sum of the liabilities, gives the amount of the proprietor's equity in his assets. It follows that every account which appears on the books after the closing of the nominal accounts reflecting the causes of the fluctuation of values, and which can be called neither an asset

nor a liability, must be either a positive or a negative component of the equity. It also follows that, when speaking of the proprietor's equity in such terms as "positive" and "negative," we must apply the former term to credit components, and the latter to debit components; whereas, when speaking of assets and liabilities, we apply the term "positive values" to debits, and the term "negative values" to credits.

The components of the equity of the sole proprietor of a business, are:

Negative	Positive
Deferred Debit Items	Deferred Credit Items
Drawing Account	Undivided Profits
	Capital Account

The components of the equity of the copartners are:

Negative	Positive
Deferred Debit Items	Deferred Credit Items
Drawing Account (Debit Balance)	Drawing Account (Credit Balance)
	Undivided Profits

Drawing Accounts

The theory of the drawing account of the sole proprietor is as follows:

It must contain, on the credit side, the profits realized during the period, and, on the debit side, the drawings in anticipation of such profits; if capital is withdrawn, the amount of the withdrawal should be charged to the capital account. The balance of the drawing account should represent the amount by which the profits have exceeded the drawings thereof, or the amount by which the drawings have exceeded the anticipated profits; when established, the balance should be closed to the credit or to the debit of the proprietor's capital account.

The theory of the drawing account of copartners is as follows:

Partners may draw, according to their articles of copartnership:

1. In anticipation of profits
2. For bonuses, salaries, emoluments, etc., accruing to them periodically
3. Capital

Drawings of capital should be charged to the capital account; drawings of bonuses, salaries, and so forth, should be charged to special credit accounts bearing appropriate names and created when the right to draw has matured. These special accounts, when created or increased by subsequent credits, constitute liabilities of the copartnership, and should not be credited to the drawing account, which is to reflect only the extent of the drawings in anticipation of profits. The drawing account proper is credited with the profits when ascertained, and debited with drawings when made. The balance of the account, if a credit balance, should, according to the spirit of the articles of copartnership, be sent to the credit of the capital account, or to a "Loan Payable" account; or they should remain in the drawing account itself, subject to the pleasure of the partner. These credit balances are not to be treated as loans to the copartnership unless it is so understood among the partners.

"Unapplied profits" are nothing more than the balance of the profit and loss, the ultimate disposition of which is uncertain. It may be withdrawn by the proprietor or he may reinvest it. In the latter case it will, in due course, be sent to his capital account.

"Undivided profits" when found in the accounts of copartners, indicate that while the profits are to be ascertained monthly, quarterly, or semiannually, they are to be divided among the partners at certain stated periods only.

The capital account, when analyzed, must give the following components:

NEGATIVE	POSITIVE
1. Original Liabilities	1. Original Assets
2. Net periodical excess of decreases of assets, plus increases of liabilities over increases of assets, plus decreases of liabilities, after addition thereto of drawings of anticipated profits	2. Net periodical excess of increases of assets, plus decreases of liabilities over decreases of assets, plus increases of liabilities, after deduction of drawings of anticipated profits in an amount smaller than the profits

Part V—Financial Statements

CHAPTER XXXIII

FINANCIAL STATEMENTS BASED ON SINGLE ENTRY

The Statement of Assets and Liabilities

The theory and the mechanism of this statement have been treated in detail in the discussion of single entry.* No further comments are at present necessary, except to point out that the statement has a twofold purpose, in that it attempts to show the financial status by means of inventories, and to marshal fluctuations of invested values in order that their meaning may be clearly expressed by the statement of resources and of their application.

The Statement of Resources and of Their Application

This statement is based not only upon accounting principles but, as well, upon a principle of economics. For everything which one receives, one has to give up something already in possession, either in the line of wealth or in the line of credit. If this is not the case, the recipient must have been the beneficiary of a gift, a legacy, a bequest, or a devise.

Recognizing this principle, and applying it to the business concern, the statement of resources claims that resources include, assets once held but now consumed; credit

* See Chapter V.

once enjoyed but now partially exhausted through usage; and increases of wealth reinvested.

If an individual has $100 in the bank, he has an asset; if he draws $25 for a suit of clothes, he turns part of his asset into a resource which he applies to the acquisition of an asset of a different nature. If, instead of consuming his asset, he acquires the suit of clothes upon a promise to pay in the future, he has turned his credit into a resource which he has applied to the acquisition of an asset which he did not possess at the beginning of the period; but he has partially consumed his credit, and to reëstablish it, he will have to consume his asset "cash."

If a business concern has obtained, at the end of a period:

1. New assets that it did not have at the beginning
2. Increases of assets held at the beginning
3. Decreases of liabilities liening the assets at the beginning

it must have consumed:

1. Certain assets held at the beginning
2. A certain amount of its credit

And if the aggregate of the things obtained has been greater than the aggregate of the consumption of assets and credit owned and enjoyed at the beginning of the period, there must have been received during the period, profits which have also been applied to the acquisition of wealth.

To illustrate the foregoing, there will be demonstrated one of the practical problems of the New York C. P. A. examination of January, 1912.

Problem

The following is a comparative balance sheet at December 31, 1910, and at December 31, 1911, presented to the directors of the Western Company at their meeting of January 5, 1912:

Assets

	12/31/1910	12/31/1911
Land	$20,000	$25,000*
Buildings	45,000	45,000
Machinery and Tools	86,000	89,000
Horse, Wagon, and Harness	10,500	10,500
Patents	6,000	6,000
Good-Will	25,000	25,000
Cash	28,300	10,300
Accounts Receivable	29,600	26,550
Investments—Bonds		15,000
Inventory of Goods in Process	10,800	14,690
Inventory of Materials and Supplies	6,750	10,300
Agency Investment		3,680
	$267,950	$281,020

Liabilities

	12/31/1910	12/31/1911
Bond and Mortgage Payable, 1915		$20,000
Notes Payable	$35,000	2,000
Accounts Payable	16,400	19,350
Reserves for Depreciation	2,500	6,750
Discount on Bonds		1,000
Capital Stock:		
Preferred	150,000	150,000
Common	50,000	50,000
Surplus	14,050	31,920
	$267,950	$281,020

* Increase due to appraisal based on rise in values of factory sites in the immediate vicinity.

Together with the above balance sheet, there was submitted to the board of directors a statement of income and profit and loss showing the profits of the year 1911 to have been $22,120. The directors state to the auditor that, in view of the decrease of cash and of the increase of capital liabilities, they are unable to ascertain what has become of the increased profits of the year. The auditor prepares and

submits to the directors, before the meeting is adjourned, an account properly named, which is so arranged as to show clearly how the Western Company has applied such resources of the year 1910 as have been lost in 1911, and the resources and profits of the year 1911.

Prepare the account rendered by the auditor.

Solution

It is presumed that, for the enlightenment of the directors, the comparative balance sheet submitted to them exhibited the increases and decreases of the present period over the last period. At all events, they must be obtained before the statement of resources can be established. This done, the factors which have contributed to the increase of wealth (i.e., increases of assets and decreases of liabilities) and the factors which have contributed to the decrease of wealth (i.e., decreases of assets and increases of liabilities) are opposed as shown on page 388.

It will be noted that the $15,000 increase of assets represented by the account "Investments in Bonds," has only consumed $14,000 of other assets, since it has been acquired at a discount of $1,000, and that only the actual cost can be employed to represent an asset consumed to acquire another; that the profits reinvested are not the amount shown by the statement of income, but are only part of the total profits which were actually received; in other words, since only $21,050 of the assets of the prior period and $22,950 of credit of the prior period have been consumed to acquire $28,120 of new assets and to rehabilitate the concern's credit in the amount of $33,000, the excess of applications over the consumption of resources must have been produced by such profits as were actually received in cash.

If the consumption of resources represented by decreases of assets and increases of liabilities is greater than the ap-

Statement (in Account Form) of Resources and of Their Application

Resources Obtained Through:

1. *Consumption of the Current Assets of the Prior Period:*			
Cash	$18,000.00		
Accounts Receivable	3,050.00		
Total		$21,050.00	
2. *Use of the Company's Credit:*			
a. To increase the liabilities of the prior period:			
Accounts Payable	$2,950.00		
b. To incur new liabilities:			
Bond and Mortgage Payable	20,000.00		
Total		22,950.00	
Total		$44,000.00	
3. *The Reinvestment of Profits, as follows:*			
Profits transferred to Surplus	$17,870.00		
Profits appropriated for reserve purposes	4,250.00		
Total	$22,120.00		
Less profits obtained through appraisal of property	5,000.00		
Remainder		17,120.00	
Total Resources		$61,120.00	

Resources Applied To:

1. *Increase Capital Assets of the Prior Period:*			
Machinery and Tools			$3,000.00
2. *Obtain New Capital Assets:*			
....		$3,680.00	
of other			
	$15,000		
Less Discount	1,000		
Remainder		14,000.00	
Total			$17,680.00
3. *Increase Working and Trading Assets:*			
Goods in Process		$3,890.00	
Materials and Supplies		3,550.00	
Total			7,440.00
Total			$28,120.00
4. *Decrease Liabilities of the Prior Period:*			
Notes Payable			33,000.00
Total Application			$61.120.00

plication, the statement will end on the credit side as follows:

"To pay for the cost of conducting the business, over and above the return thereof in the line of profits," or some such appropriate explanation.

Proof of Ledger Assets

The Insurance Department of the State of New York requires insurance companies to submit a statement calling for:

1. Amount of ledger assets at beginning of the year........................	$........
2. Income of the year..................	....
Total............	$........
3. Disbursements of the year...........	....
Balance—representing assets at the end of the year......................	$........

Recognizing the principles of accounting supporting the insurance statement, the New York Board of C. P. A. Examiners applied these same principles to a mercantile business, and built up an examination problem in June, 1912, which was severely criticized by accountants who claimed that it was impossible to start with the amount of assets at the beginning of the period, add the income, deduct cash disbursements, and arrive at the assets at the end.

The criticism is based on sandy foundations. In accounting parlance, the word "disbursements" applies to cash, only if it is qualified as "cash disbursements." Speaking from the broad point of view of principles of accounting, an asset consumed is an asset disbursed, while cash disbursed to acquire another asset is not a disbursement of an asset, but

merely reflects an exchange. To illustrate the foregoing, there is submitted a problem which is modeled upon the lines of the New York C. P. A. problem referred to; it appears to have, over its predecessor, the advantage of presenting the problematic requirements in a more lucid manner.

Problem

The ledger of the Secaucus Supply Company shows at January 1, 1914:

Debits:

Land and Buildings, $30,500; Delivery Equipment, $5,000; Investment Bonds, $9,500; Inventory Merchandise, $12,000; Stable Supplies, $150; Cash, $16,500; Accounts Receivable, $14,800.

Credits:

Accounts Payable, $9,000; Surplus, $17,450; Mortgage Payable, $12,000; Capital Stock, $50,000.

The books show at June 30, 1914:

Cash Book:

Capital Stock, $5,000; Customers, $35,000; Interest on Investments, $400; Interest on Bank Balances, $80; Mortgage Payable reduced, $3,500; Creditors, $20,000; Delivery Equipment, $300; Freight, $425; Stable Supplies, $200; Salaries of Salesmen, $1,500; Advertising, $50; Administrative Expense, $6,500; Interest on Mortgage, $150.

Profit and Loss Account:

Debits:

Purchases, $20,000; Freight outward and inward, $425; Stable Supplies, $235; Salaries of Salesmen, $1,575; Advertising, $50; Administrative Expense, $6,500; Interest on Mortgage, $210.

Credits:

Interest on Investments, $490; Interest on Bank Balance, $80; Sales, $38,500; Increase of Merchandise Inventory, $500.

Required:

1. A statement which will give full expression to the following formula:

   "Initial Assets" plus "Income of the Period" less "Disbursements of the Period" equal "Assets at the Close of the Period."

2. The balance sheet of the company at June 30, 1914, supporting the total of the assets shown by statement 1.

NOTE: The accounting period extends from January 1, 1914, to June 30, 1914.

In connection with the solution of this problem—which appears on the pages immediately following—it is pointed out:

1. That the sale of the capital stock in the amount of $5,000 has increased the asset "cash," not through the channel of income, but through the incurrence of a liability to stockholders.
2. That adding the amount received from capital contributions to the original assets, we obtain the total amount of assets with which the concern started, and the addition thereto through sources not directly connected with income.
3. That if we add to this total of assets, all the income of the period, whether received or accrued, we have taken cognizance of all the positive fluctuations of the assets, and that the result of the addi-

Solution

Proof of Ledger Assets

1. *Capital:*			
Capital Stock Outstanding		$55,000.00	
Amount of Ledger Assets at December 31, 1913		$88,450.00	
Increase of Capital Stock during the year		5,000.00	
Total			$93,450.00
2. *Income:*			
Sales		$38,500.00	
Interest:			
On Bank Balances	$80.00		
On Investments (Received $400, Accrued $90)	490.00		
Total		570.00	
Total Income			39,070.00
Total			$132,520.00
3. *Disbursements:*			
Cost of Income:			
Purchases:			
Paid for	$20,000.00		
Less transferred to Inventory (Increase over Prior Year)	500.00		
Remainder	$19,500.00		
Freight	425.00		
Stable Supplies	235.00		
Salaries of Salesmen	1,500.00		

Proof of Ledger Assets—*Continued*

Advertising	50.00		
Administration Expense	6,500.00		
Interest on Mortgage	150.00		
Total Cost of Income		$28,360.00	
Reduction of Liabilities:			
Paid on Mortgage		3,500.00	
Total Disbursements			31,860.00
Balance at June 30th, 1914 (representing assets as per balance sheet attached)			$100,660.00

Balance Sheet

Assets		*Liabilities and Surplus*	
Capital Assets:			
	$30,500.00	and Outstanding	$55,000.00
	5,300.00		8,500.00
Investments—Bonds	9,500.00		
:			9,000.00
	12,500.00	Accrued Salaries	75.00
	115.00	Accrued Interest on Mortgage	60.00
		Surplus	28,025.00
Cash	24,355.00		
Accounts Receivable	18,300.00		
Accrued Interest on Investments	90.00		
Total Assets	$100,660.00	Total Liabilities and Surplus	$100,660.00

tion would be the amount of the concern's assets if it had cost nothing to obtain the income.

4. That the cost of obtaining income can only be that which has consumed assets, and must exclude that which has brought about the recording of an accrued liability.

To make this still clearer:

Stable supplies show at the beginning of the period a value of	$150.00
During the period there have been purchased for cash	200.00
Total	$350.00
There has been charged to profit and loss, as expended	235.00
Leaving a remainder of	$115.00

Hence, the disbursement of the asset has been not $200 disbursed in cash, but that amount plus $35 of the original asset held at the beginning of the period, and now consumed.

An essential principle to be borne in mind when preparing this statement, is that all the accruals of income credits must be considered, since they affect the assets; whereas all the accruals of income debits must be ignored, since they only affect liabilities. Consider, for instance, the salaries of the salesmen: $1,500 was paid in cash, while $1,575 was charged to profit and loss; the only part of the expense which affected assets is the part paid in cash; hence, it is the only one of which the statement takes cognizance.

The first and second statements discussed above are said to be based on single entry, because they can be established from books kept in accordance with the principles of that method of bookkeeping which recognizes only inventories

of assets and liabilities revealing increases and decreases, without regard to the causes which brought about the fluctuations. As to the third, it is based on the same principles, since it considers only increases and decreases of assets without regard to the nature of the bookkeeping entries which gave expression to their counterpart.

CHAPTER XXXIV

TRIAL BALANCE—WORKING BALANCE SHEET

Trial Balance

The trial balance is not a financial statement; it is merely a list of the balances of the accounts remaining open on a double-entry ledger at sundry times, i.e.:

1. After the posting of the transactions of the month, as reflected by the books of original entry.
2. After the posting of the accruals and of the inventories, and the possible adjustment of accounts, due to a desire for more accurate or more extensive distribution.
3. After the posting of the closing entries which establish the profit and loss account and either leave it as it then stands, until the directors have passed upon its disposition, or send it to the credit of the accounts entitled thereto.

The trial balance, in fact, is nothing more than a surface indication that the books are in balance, and that the transactions have been accurately recorded.

Classified Trial Balance, or Working Balance Sheet

Here again we have a statement which cannot be called financial; it leads to the establishment of the balance sheet and of the statement of income and profit and loss by means of the following process:

1. It classifies the trial balance so as to gather, either on separate sheets, or on the opposite sides of a sheet divided

in the middle, real accounts, accounts partially real and partially nominal, and nominal accounts having a debit balance; liabilities, surplus, components, free or appropriated, and nominal accounts having a credit balance.

2. It provides for journal adjustments, debits, and credits, necessary to apply inventories or to redistribute certain items.

3. It classifies the resulting figures as between:

a. Income debits and assets
b. Income credits and liabilities

In fact, it aims at the presentation of a picture of a general ledger subdivided into the assets and liabilities section, and the income section. When completed, its accuracy is determined by:

1. Adding together the trial balance debits and the debit journal adjustments, and deducting from the total thus obtained the credit journal adjustments, and comparing the remainder with the total of the assets and of the income debits.
2. Adding together the trial balance credits and the credit journal adjustments, and deducting from the total thus obtained the debit journal adjustments, and comparing the remainder with the total of the liabilities and of the income credits.

The working balance sheet as described is frequently used by accountants who, having to establish financial statements within a stated period, find the general ledger incomplete, improperly kept, or grossly inaccurate. They take as a starting point a trial balance the exactness of which has been established, gather the facts of the subsequent period from the books of original entry, journalize the results, and post them on the working sheet, which is thus raised to the dignity of a ledger.

The handling of the working balance sheet is at no time difficult; however, it cannot be used successfully by anyone not thoroughly familiar with the mechanism of ledger accounts. To illustrate this point, let us attempt to use the sheet described in the foregoing, for the solution of a New York C. P. A. examination problem.

Problem

(New York C. P. A. Examination, June 30, 1912)*

The following balances are taken from the books of the Roberts Manufacturing Co. of New York City, on the 31st of December, 1910:

Inventory of Finished Goods (Jan. 1)	$3,684.57
Inventory of Raw Materials (Jan. 1)	11,392.70
Purchases of Raw Materials	62,519.85
Sales	217,387.42
Wages	109,317.88
Rent	19,500.00
Discounts Received on Purchases	375.60
Discounts Allowed on Sales	186.36
Power, Light, and Heat	8,710.64
Light and Heat for Office	168.00
Repairs	1,090.00
Packing	2,017.00
Factory Expense	3,270.00
General Expense	5,230.00
Factory Insurance	1,050.00
General Insurance	750.00
Machinery and Plant	12,350.00
Tools	2,600.00
Commissions	7,642.00
Office Salaries	9,700.00
Salesmen's Salaries	8,930.00
Interest on Loans	440.00
Loans Payable	22,000.00
Discount Lost	120.00
Notes Receivable	130,000.00
Notes Receivable, Discounted	8,000.00
Notes Payable	19,500.00

* Certain of the requirements of this problem have been omitted, as having no connection with the purpose of the illustration.

Accounts Receivable	101,026.00
Accounts Payable	30,020.00
Office Furniture	1,100.00
Furniture and Fixtures	1,950.00
Cash on Hand	1,825.00
Cash in Banks	26,467.00
Returned Sales	276.00
Capital Stock	200,000.00
Reserve for Depreciation	3,236.98
Reserve for Bad Debts	5,727.00
Freight and Cartage Inward	727.00
Stable Expenses	2,750.00
Horses, Wagons and Harness	8,500.00
Postage and Expressage	1,250.00
Superintendence	3,500.00
Taxes	250.00
Good-Will	10,000.00
Stationery and Printing	1,080.00
Advertising	8,630.00
Surplus (1909)	63,753.00

1. Prepare from the above a trial balance arranged in systematic order, so as to facilitate the preparation of financial or business statements.

2. Draft journal entries for closing the books.

The following items are to be taken into consideration:

Inventories:	
Raw Materials	$16,250.00
Finished Goods	9,386.00
Tools	2,000.00
Office Furniture	1,000.00
Furniture and Fixtures	1,500.00
Stationery and Printing	300.00

Allow for depreciations: on machinery, 5%; on horses, wagons and harness, 10%.

Reserve for bad debts, 3% on accounts receivable only.

The item for rent, $19,500, is to be apportioned as follows: 53% for factory, 22% for salesrooms, and 25% for office.

The item of superintendence, $3,500, is to be divided, 3/5 to factory and 2/5 to general expense.

Solution

The arrangement of the trial balance need not, in this instance, be particularly respectful of the different theories which dictate the position to be occupied in the statement of income by the sundry elements of income, profits, expenses, and losses. These theories will be fully explained later. Let it be sufficient, at this point, to be orderly and logical. The purpose of the working sheet will stand out clearly at all events.

Having classified the trial balance, the first care should be to journalize the adjustments to be made, and to post the journal entries in the working papers, precisely as we would in the ledger.

Journal Entries

Inventory Raw Materials—New Account........	$16,250.00	
Inventory Finished Goods " "	9,386.00	
Tools " "	2,000.00	
Office Furniture " "	1,000.00	
Furniture and Fixtures " "	1,500.00	
Stationery and Printing " "	300.00	
To Inventory Raw Materials—Old Account		$16,250.00
" Inventory Finished Goods " "		9,386.00
" Tools " "		2,000.00
" Office Furniture " "		1,000.00
" Furniture and Fixtures " "		1,500.00
" Stationery and Printing " "		300.00
To apply closing inventories.		
Provision for Depreciation of Machinery and Plant, 5%..................................	617.50	
Provision for Depreciation of Delivery Equipment, 10%..................................	850.00	
To Reserve for Depreciation.............		1,467.50
To provide for depreciation of physical assets.		
Reserve for Bad Debts.........................	2,696.22	
To Surplus..............................		2,696.22
To reduce reserve to 3% of balance of asset account, i.e., $101,026.00.		

Factory Rent 53%	10,335.00	
Rent of Salesroom 22%	4,290.00	
Rent of Office 25%	4,875.00	
100%		
To Rent		19,500.00
To distribute.		
Superintendence—Factory 3/5	2,100.00	
Office Salaries 2/5	1,400.00	
5/5		
To Superintendence		3,500.00
To distribute.		
Tools Consumed	600.00	
Furniture and Fixtures Written Off	450.00	
Office Furniture Written Off	100.00	
To Tools		600.00
" Furniture and Fixtures		450.00
" Office Furniture		100.00
To apply loss due to reappraisal of above properties.		
Stationery and Printing Consumed	780.00	
To Stationery and Printing		780.00
To take out of asset account the part of it which is nominal.		
Inventory of Raw Materials	4,857.30	
To Profit and Loss		4,857.30
For increase of inventory. This will act in the Profit and Loss account as a reduction of the cost of goods purchased, and determine the cost of goods manufactured.		
Inventory of Finished Goods—Old Account	5,701.43	
To Profit and Loss		5,701.43
For increase of inventory. This will act in the Profit and Loss account as a reduction of the cost of goods manufactured, and determine the cost of goods sold.		

The adjusting entries having been made, the closing entries would consist in gathering all items constituting classes of economic facts, and closing them by classes in the Profit and Loss account, in order to make the latter reproduce accurately the skeleton of the statement of income and

WORKING BALANCE SHEET

Trial Balance Debits* Accounts	Amount	Journal Adjustments Dr.	Journal Adjustments Cr.	Income Debits	Assets
Machinery and Plant	$12,350.00				$12,350.00
Tools	2,600.00	$2,000.00	$600.00 2,000.00		2,000.00
Furniture and Fixtures	1,950.00	1,500.00	450.00 1,500.00		1,500.00
Office Furniture	1,100.00	1,000.00	100.00 1,000.00		1,000.00
Horse, Wagon and Harness	8,500.00				8,500.00
Good-Will	10,000.00				10,000.00
Inventory Finished Goods	3,684.57	9,386.00 5,701.43	9,386.00		9,386.00
Inventory Raw Materials	11,392.70	16,250.00 4,857.30	16,250.00		16,250.00
Stationery and Printing	1,080.00	300.00	300.00 780.00		300.00
Cash in Hand	1,825.00				1,825.00
Cash in Bank	26,467.00				26,467.00
Notes Receivable	130,000.00				130,000.00
Accounts Receivable	101,026.00				101,026.00
Freight and Cartage Inward	727.00			$727.00	
Purchases of Raw Material	62,519.85			62,519.85	
Returned Sales	276.00			276.00	
Wages	109,317.88			109,317.88	
Power, Light and Heat	8,710.64			8,710.64	
Repairs	1,090.00			1,090.00	
Tools Consumed		600.00		600.00	

* For proof see page 404.

Superintendence	3,500.00		3,500.00		
Factory Expense	3,270.00			3,270.00	
Factory Rent		10,335.00		10,335.00	
Factory Insurance	1,050.00			1,050.00	
Superintendence—Factory		2,100.00		2,100.00	
Packing	2,017.00			2,017.00	
Rent of Salesrooms		4,290.00		4,290.00	
Advertising	8,630.00			8,630.00	
Commissions	7,642.00			7,642.00	
Salesmen's Salaries	8,930.00			8,930.00	
	2,750.00			2,750.00	
	9,700.00	1,400.00		11,100.00	
Rent—Office		4,875.00		4,875.00	
Light and Heat—Office	168.00			168.00	
General Expense	5,230.00			5,230.00	
Rent	19,500.00		19,500.00		
Stationery and Printing Consumed		780.00		780.00	
Postage and Expressage	1,250.00			1,250.00	
Discount on Sales	186.36			186.36	
General Insurance	750.00			750.00	
Taxes	250.00			250.00	
Interest on Loans	440.00			440.00	
Discount on Notes and Loans	120.00			120.00	
Provision for Depreciation of Horse, Wagon and Harness		850.00		850.00	
Provision for Depreciation of Machinery and Plant		617.50		617.50	
Furniture and Fixtures Written Off		450.00		450.00	
Office Furniture Written Off		100.00		100.00	
	$570,000.00	$67,392.23	$55,366.00	$261,422.23	$320,604.00

WORKING BALANCE SHEET—*Continued*

Trial Balance Credits Accounts	Amount	Journal Adjustments Dr.	Journal Adjustments Cr.	Income Credits	Liabilities
Capital Stock	$200,000.00	....	....	....	$200,000.00
Loans Payable	22,000.00	....	....	....	22,000.00
	19,500.00	....	....	....	19,500.00
	30,020.00	....	....	....	30,020.00
	8,000.00	....	....	....	8,000.00
Reserve for Depreciation	3,236.98	....	$1,467.50	....	4,704.48
Reserve for Bad Debts	5,727.00	$2,696.22	....	....	3,030.78
Surplus	63,753.00	....	2,696.22	....	66,449.22
Sales	217,387.42	....	....	$217,387.42	....
Discount on Purchases	375.60	....	....	375.60	....
Profit and Loss	....	....	5,701.43 4,857.30	10,558.73	....
	$570,000.00	$2,696.22	$14,722.45	$228,321.75	$353,704.48

PROOF OF DEBIT SIDE

	$570,000.00		$261,422.23
Plus	67,392.23	Plus	320,604.00
	$637,392.23		
Less	55,366.00		
	$582,026.23		$582,026.23

PROOF OF CREDIT SIDE

	$570,000.00		$228,321.75
Less	2,696.22	Plus	353,704.48
	$567,303.78		
Plus	14,722.45		
	$582,026.23		$582,026.23

profit and loss; these entries will be omitted here as immaterial so far as the illustration of the working sheet is concerned.

The picture presented by the foregoing working balance sheet is an exact reproduction, just before closing, of a highly analytical and well-planned ledger. Sometimes the accountant carries his preliminary work still further, and distributes the income debits and credits as follows:

1. Distribution of Income Debits
    - a. Cost of Goods
        - (1) Labor
        - (2) Material
        - (3) Overhead
    - b. Shipping Expense
    - c. Selling Expense
    - d. Administrative Expense
    - e. Deductions from Income
    - f. Profit and Loss Debits
    - g. Surplus Adjustment
    - h. Deductions from Income from Sales
2. Distribution of Income Credits
    - a. Income from Sales
    - b. Additions to Income
    - c. Profit and Loss Credits
    - d. Surplus Adjustment

CHAPTER XXXV

THE BALANCE SHEET

Arrangement as to Assets and Liabilities

The balance sheet exhibits the balances of the real accounts open on the books after the closing of the nominal accounts. Whether these balances shall be presented in account form, i.e., assets on one side and liabilities on the other side of a sheet divided in the middle, or in statement form, i.e., assets following liabilities, or vice versa, is immaterial to accounting.

Whether the assets are shown on the credit side or on the debit side, depends upon the point of view. If we consider the balance sheet as a classified statement of financial facts contained in the general ledger, we shall naturally present the facts as they stand on the ledger, that is to say, debits on the left and credits on the right if the account form is adopted, or assets first and liabilities second if the statement form is adopted.

It has been said by English accountants that the balance sheet is an account rendered by the business to the proprietor. If we accept this view, we must credit the proprietor with his assets and debit him with his liabilities. If, on the other hand, we take the balance sheet to be purely and simply a concrete presentation of financial facts, we must understand the business venture to say:

1. I have
2. I owe

Arrangement as to Order of Items

The desire of accountants to make the balance sheet valuable as a logical presentation of facts, has led them to build it up on lines which are as varied as the range of their minds. Some practitioners oppose:

1. Capital assets and working and trading assets to capital liabilities
2. Current assets to current liabilities
3. Deferred debit items to deferred credit items

Group 1 represents the actual investment of capital contributed or borrowed, in fixed assets and in assets remaining unconsumed in pursuance of the purpose of the business.

Group 2 represents the excess of liquid assets over the amount of short-term debts, or vice versa.

Group 3 represents positive and negative elements the application of which to income is postponed until a subsequent period.

The result represents the equity in undivided profits reinvested, and either appropriated for reserves, or free for distribution; and, by adding to this the capital account of the private trader, or the capital stock of the corporation, the true equity of the interested parties is found. This is illustrated by the balance sheet which follows:

GENERAL BALANCE SHEET OF THE X. Y. Z. COMPANY
AT DECEMBER 31, 1913

Assets

Capital Assets:		
Land	$5,000.00	
Building	10,000.00	
Machinery and Tools	11,300.00	
Transportation Equipment	2,500.00	$28,800.00

General Balance Sheet—*Continued*

Working and Trading Assets:		
Inventory of Merchandise	$16,950.00	
Stable Supplies	330.00	
Stationery and Printing	140.00	17,420.00
Current Assets:		
Cash	$7,830.00	
Notes Receivable	4,000.00	
Accounts Receivable	10,385.00	22,215.00
Deferred Debit Items:		
Rent—unexpired portion	$60.00	
Insurance—unexpired portion	80.00	140.00
Total		$68,575.00

Liabilities

Capital Liabilities:		
Capital Stock	$40,000.00	
Mortgage Payable	5,800.00	$45,800.00
Current Liabilities:		
Accounts Payable		12,350.00
Surplus:		
Free	$8,425.00	
Appropriated:		
Reserve for Depreciation	1,000.00	
Reserve for Bad Debts	1,000.00	10,425.00
Total		$68,575.00

Equity of stockholders:

Assets	$68,575.00
Liabilities exclusive of capital stock	18,150.00
Excess of assets over liabilities to outsiders	$50,425.00

Equity represented by:

Capital stock		$40,000.00
Surplus:		
Free	$8,425.00	
Appropriated	2,000.00	10,425.00
		$50,425.00

Variations in Arrangement of Balance Sheet

Other accountants prefer to exhibit first of all the liquid assets opposed to liquid liabilities. They claim that nothing matters more to the reader of the statement than the extent of the free capital available for current needs. Still others like to show:

1. All the assets, without particular regard to their classification
2. All the liabilities to outsiders
3. The extent of the proprietorship represented by:
    a. Capital investments as shown by capital accounts or capital stock
    b. Surplus
    c. Reserves
    d. Deferred credit items

Lastly, some will show all reserves as deductions from the assets for which they provide, while others will show them either as liabilities or as proprietorship.

It is certain that in the expression of the facts, the individual accountant is guided either by his purpose or by the extent of his conception of the science of accounting. To criticize is often tantamount to a lack of appreciation of the guiding purpose, or to lack of charity for the supposed shortcomings of men whom we measure according to our own exalted standards. It remains true, however, that the bal-

ance sheet of going concerns is built up around principles of economics, of finance, and of business common sense.

The unsophisticated student of accounting can readily be made to understand that a balance sheet at any given date is only one of the components of a series of statements which, in the aggregate, exhibit clearly the fortunes of the business venture. The simplest way to demonstrate this is to explain the mechanism of the double-form balance sheet.

Double-Form Balance Sheet

The theory underlying this form is to the effect that every enterprise is divided into two distinct parts:

1. The financing branch
2. The operating branch

At the incipiency of the enterprise, the financing branch obtains the required capital, acquires the needed assets, and places at the disposal of the operating branch certain "working and trading" assets, and certain "current" (or liquid) assets free from, or subject to, certain "current" liabilities. The net value of the assets thus transferred is charged to the operating branch, and remains untouched until the period for an accounting has matured. Giving expression to the above in double balance sheet form, we obtain:

GENERAL BALANCE SHEET OF..........

AT..............

FINANCING

Assets		*Liabilities*	
Plant and Machinery.	$300,000.00	Capital Stock.........	$400,000.00
Shop and Hand Tools.	20,000.00	Real Estate Mortgage.	60,700.00
Shafting, Belting, and Pulleys	5,000.00		
Travelling and Stationery Cranes......	6,500.00		
R. R. Siding and Equipment	3,400.00		
Flasks and Patterns...	1,800.00		
Patents and Good-Will	45,000.00		
Organization Expense.	4,000.00		
Operating Branch.....	75,000.00		
	$460,700.00		$460,700.00

OPERATING

Assets		*Liabilities*	
Manufacturing Materials	$62,000.00	Accounts Payable......	$20,000.00
Sundry Supplies.......	2,000.00	Financing Branch......	75,000.00
Cash on Deposit.......	30,000.00		
Cash on Hand.........	1,000.00		
	$95,000.00		$95,000.00

Periodical Fluctuations in Double-Form Balance Sheet

As operations progress, the operating branch transforms working assets into current assets, and current assets into working assets; current liabilities are also incurred in exchange for assets, or for valuable services. As a result, the operating branch obtains profits measured by the excess of the increases of assets plus decreases of liabilities, over decreases of assets plus increases of liabilities.

The profits made by the operating branch are credited to surplus by the financing, and charged to the operating branch when the latter retains them for current needs. As to the operating branch, it correspondingly debits Profit and Loss, in order to close that account, and credits "Financing" from whom it has borrowed profits.

If the profits are distributed to the stockholders by the financing branch, the account with the operating branch is credited with the amount of liquid assets withdrawn from it to liquidate the debt. Operating, in turn, debits the account with "Financing," and credits the asset with which it has parted.

Thus, from period to period, the fluctuations of the account "Operating Branch" found in the "Financing" part of the double-form balance sheet, show the gradual increase of the wealth of the concern.

If no distribution of the profits has taken place, and if the profits have remained reinvested in the operations, then the correlation is absolute. If the profits have not been distributed, but have been withdrawn in part from operations for the purpose of acquiring additional capital assets, the aggregate amount of the favorable fluctuations is to be found:

1. In the increase of the account "Operating"
2. In the increase of the capital assets

both being measured in total by the amount of the surplus appearing in the financing section. If the profits have been partially distributed, the aggregate of the profits made since the incipiency of business is obtained by the addition of (1) the charges to net profits for dividends, shown by the statement of income; (2) the increase of the "operating" account; (3) the increases of "capital assets."

Simple, logical, and lucid as it may be, the double-form balance sheet is seldom used in America. Its lack of popu-

larity is probably due to a conviction that the purpose of a balance sheet is to exhibit financial status at any given date, and that the periodical fluctuations of that status are better shown by the statement of income. But, whether or not the double form is used, it remains true that its logical spirit should influence the mechanism of all balance sheets.

Opposition of Balance Sheet Items

Whatever may be the nature of the fixed assets acquired out of capital contributed and borrowed, they should be opposed to the long-term liabilities to insiders and to outsiders, incurred for their acquisition; and the same is true of current assets and of current liabilities. The status of the working and trading assets is not quite so clear. Certain accountants say that they are "current" precisely like cash or accounts receivable, since they can be readily disposed of, either as they stand if they are trading assets, or in their raw state if they are working assets.

It must be admitted that if the financial ease or distress of a concern are to be measured by the correlation existing between current assets and current liabilities, it would oftentimes be unfair to separate working and trading assets from the current liabilities incurred to obtain them. It is probably for this reason that the Interstate Commerce Commission has done away with the terms "Working and Trading" and "Current," and has blended the two under the heading "Working Assets," which it opposes to "Working Liabilities."

Form of General Balance Sheet

To illustrate the foregoing, and prepare the ground for further discussion, the following comparative general balance sheet of the Black Diamond Manufacturing Company at December 31, 1912, and at December 31, 1913, is presented.

The Black Diamond Manufacturing Company

Comparative General Balance Sheet at December 31, 1912, and at December 31, 1913

	December 31, 1912	December 31, 1913	Increases Decreases*
Assets and Deferred Debit Items:			
Capital Assets:			
Land	$57,157.00	$57,157.00	....
Factory and Office Buildings.....	70,990.44	70,990.44	....
Building Equipment.............	13,105.41	13,439.27	$333.86
Power Plant....................	15,904.02	16,404.43	500.41
Machinery and Tools............	36,050.74	39,471.77	3,421.03
Experimental and Improvement Plant	3,472.03	3,481.21	9.18
Maintenance Plant...............	6,218.84	6,312.06	93.22
Printing Plant..................	669.25	669.25	....
Transportation Plant............	5,769.68	7,329.01	1,559.33
Furniture and Fixtures..........	4,369.96	4,654.94	284.98
Trade-Marks and Patents.......	2,382.78	2,692.02	309.24
Total Capital Assets............	$216,090.15	$222,601.40	$6,511.25
Working and Trading Assets:			
Working:			
Goods in Process—Inventory....	$12,388.04	$10,299.68	*$2,088.36*
Manufacturing Materials and Supplies—Inventory	26,555.65	36,653.27	10,097.62
Materials for Repairs and Maintenance—Inventory	3,953.60	6,350.65	2,397.05
Scrap Material—Inventory.......	218.86	257.22	38.36
Shipping Material—Inventory....	114.78	220.19	105.41
Coal, Oil and Waste—Inventory..	97.00	97.30	.30
Advertising Matter..............	11,251.97	10,473.33	*778.64*
Stationery and Printing.........	50.56	55.70	5.14
	$54,630.46	$64,407.34	$9,776.88
Trading:			
Finished Goods—Inventory......	56,631.05	53,651.11	*2,979.94*
Total Working and Trading.......	$111,261.51	$118,058.45	$6,796.94
Total Capital and Working and Trading Assets................	$327,351.66	$340,659.85	$13,308.19

* Decreases are shown in italics.

COMPARATIVE GENERAL BALANCE SHEET—*Continued*

	December 31, 1912	December 31, 1913	Increases Decreases*
Current Assets:			
Cash in Banks and in Office.....	$1,865.61	$18,773.15	$16,907.54
Special Deposits................	11,093.23	14,690.40	3,597.17
Notes Receivable................	....	1,000.00	1,000.00
Customers' Accounts Receivable..	39,588.75	53,376.04	13,787.29
Claims against Transportation Cos.	529.08	732.32	203.24
Advances to Employees..........	951.57	589.08	*362.49*
Total Current Assets............	$54,028.24	$89,160.99	$35,132.75
Deferred Debit Items:			
Fire Insurance Premiums, unexpired portion................	$1,583.33	$1,411.85	*$171.48*
Freight and Cartage Outward, applicable to goods finished, warehoused, and unsold............	....	3,670.46	3,670.46
Total Deferred Debit Items......	$1,583.33	$5,082.31	$3,498.98
Total Current Assets and Deferred Debit Items......................	$55,611.57	$94,243.30	$38,631.73
Total Assets and Deferred Debit Items	$382,963.23	$434,903.15	$51,939.92
LIABILITIES AND SURPLUS:			
Capital Liabilities:			
Capital Stock Authorized, Issued and Outstanding..............	$50,000.00	$50,000.00	....
Real Estate Bond and Mortgage..	109,100.00	98,300.00	*$10,800.00*
Total Capital Liabilities.........	$159,100.00	$148,300.00	*$10,800.00*
Current Liabilities:			
Notes and Loans Payable........	$31,700.00	$18,749.96	*$12,950.04*
Accounts Payable:			
a. To Creditors................	8,953.12	1,581.79	*7,371.33*
b. " Employees — Wages Accrued	774.82	10,717.24	9,942.42

* Decreases are shown in italics.

COMPARATIVE GENERAL BALANCE SHEET—*Continued*

	December 31, 1912	December 31, 1913	Increases Decreases*
c. To Salesmen—Salaries, Commissions and Expenses	1,182.20	3,588.19	2,405.99
d. " Employees—Profit Sharing Scheme............	9,689.28	734.79	*8,954.49*
e. " Employees—Deposits for Use of Tools..........	10.75	63.58	52.83
f. " State—For Taxes.......	....	1,116.12	1,116.12
Total Current Liabilities........	$52,310.17	$36,551.67	*$15,758.50*
Total Liabilities..................	$211,410.17	$184,851.67	*$26,558.50*
Surplus:			
a. Appropriated:			
For Reserves for Claims against Transportation Companies	$184.75	$569.73	$384.98
For Reserves for Depreciation of Physical Assets....	....	9,481.39	9,481.39
For Possible Losses of Accounts Receivable.........	....	2,715.34	2,715.34
Total Appropriated..........	$184.75	$12,766.46	$12,581.71
b. Available for Dividends.......	171,368.31	237,285.02	65,916.71
Total Surplus...................	$171,553.06	$250,051.48	$78,498.42
Total Liabilities and Surplus.......	$382,963.23	$434,903.15	$51,939.92

* Decreases are shown in italics.

Attention is called to the fact that the apparent differences in handling the facts of the two periods covered by these balance sheets, are due to a change of accounting policy.†

Reading a Balance Sheet

The reading of a balance sheet depends, of course, upon the way the facts are presented. In the foregoing example,

† See reserves, Chapter XXIV, and deferred debit items, Chapter XXVI.

it is plain that, as between the beginning of operations and the closing date of the last period, \$340,659.85 of capital and working and trading assets have been obtained out of \$148,300.00 of capital liabilities, and that \$94,243.30 of current assets and deferred debit items have been obtained out of \$36,551.67 of current liabilities. Thus, the excess of capital assets, \$192,359.85 (including working and trading assets), over the capital liabilities, and the current assets, \$57,691.63 (including deferred debit items), must in the aggregate, represent reinvested profits as measured by surplus in its two components, (1) appropriations for reserves, (2) available for distribution. Correspondingly, it is evident that as between the two periods ended December 31, 1912, and December 31, 1913, the aggregate of the increase of capital assets, \$13,308.19 (including working and trading assets), and of the decrease of capital liabilities, \$10,-800.00, or altogether \$24,108.19; and the aggregate of the increase of other assets, \$38,631.73, and of the decrease of current liabilities, \$15,758.50, or altogether \$54,390.23, represent a sum of \$78,498.42 which must give the increase of surplus of the last period over the preceding one.

CHAPTER XXXVI

SPECIAL FORMS OF BALANCE SHEETS

Bank Balance Sheet

The classification of the balance sheet, as suggested in the preceding chapter, does not apply to financial corporations, insurance companies, and public utilities corporations, regulated by the Interstate Commerce Commission or by public service commissions. The classification of the balance sheet of a bank is indicated by the purpose of the institution itself, considered in connection with the purpose of the depositor. The purpose of the bank is to invest the money intrusted to it by depositors, or to hold it in reserve, subject to call, in exchange for a compensation which represents the difference between the earnings of the depositor's funds, and the amount of such earnings as the depositor is willing to accept under the form of interest, together with the expenses of conducting the enterprise.

The purpose of the depositor is to place his money in a safe place, to receive interest on his deposits, and to simplify means of exchange by issuing orders upon the bank to remit to others or to pay to him such funds as he wishes to withdraw. It follows that the all-essential thing in the balance sheet of a bank is to arrange the assets so as to show:

1. The investments of different nature, required by law or otherwise, which, while liquid in principle, are not as yet converted into cash.
2. The specie, legal tender notes, certificates of deposit, held ready for payment over the counter.

3. The other assets of the bank acquired by the directorate out of capital contributions or out of profits accumulated for reinvestment.

As to the liabilities, if there ever is a reason for bringing in the liabilities to outsiders before the liabilities to stockholders, that reason is to be found in the balance sheet of a bank. That banks do not always reason as accountants do, is evidenced by the following balance sheet which gives the form used by a national bank of New York City. This shows the bank buildings and fixtures before the cash resources of the bank, and the capital stock before the liabilities to depositors.

Balance Sheet of National Bank

Resources

Loans and Discounts			$3,340,988.75
Bills Discounted:			
Single Name	$836,434.00		
Double Name	490,191.13		
Collateral Loans	469,810.00	$1,796,435.13	
Demand Loans:			
Secured by Collateral	$692,604.47		
Not Secured	63,306.90	755,911.37	
Time Loans		663,500.00	
($177,500 of these are hypothecated.)			
Foreign Bills		89,936.65	
Past-Due Paper		35,205.60	
U. S. Bonds and Premium			301,437.50
U. S. Bonds for Circulation		$250,000.00	
U. S. Bonds for Deposits		50,000.00	
Premium on September 15, 1913		1,437.50	
Investments			280,989.32
Florida Transportation Co. Bonds		$17,600.00	
Second Mortgage on Real Estate		6,500.00	
Milltown Mining and Brick Bonds		20,000.00	
17th Avenue Property		144,591.99	
1st Avenue Property		42,297.33	
Long Island Sound Tunnel Bonds		50,000.00	

BALANCE SHEET—*Continued*

Bank Buildings and Fixtures		118,799.95
Land and Building	$106,011.45	
Furniture	12,788.50	
Due from Banks		233,651.50
Twelfth National Bank	$159,751.20	
Twentieth Century Bank	31,634.88	
East Side National Bank	20,095.12	
Bank of Newton	7,340.22	
West End Bank	3,138.88	
Sundry Checks out for collection	11,691.20	
Cash and Reserve		971,616.44
Cash (See report for particulars)	$516,950.35	
Cash deposited with U. S. Treasurer for Redemption Fund	25,000.00	
First National Bank	203,890.11	
Tenth Avenue National Bank	122,535.58	
German National Bank	103,240.40	
		$5,247,483.46

Liabilities

Capital Stock			$350,000.00
3,500 shares of $100 each, fully paid.			
Surplus			515,000.00
Balance of Surplus, November 15, 1912		$500,000.00	
Added from Profit during year to November 15, 1913		15,000.00	
Undivided Profits			51,332.85
Balance of Account, November 15, 1912		$49,894.07	
Profit for year ended November 15, 1913		40,238.78	
Less:		$90,132.85	
Dividends Paid	$23,800.00		
Transferred to Surplus	15,000.00	38,800.00	
Balance of Account		$51,332.85	
Circulation			248,300.00
Authorized Circulation		$250,000.00	
Deduct Circulation held by Comptroller		1,700.00	

BALANCE SHEET—*Continued*

Due Other Banks......................................		197,975.51
Twentieth Century Bank................	$163,824.49	
Twelfth National Bank.................	23,615.80	
Bank of Oldtown.......................	10,535.22	
Bills Payable (Secured)................................		177,500.00
(Due to other national banks—secured by time loans hypothecated.)		
Dividend Checks Not Presented........................		1,200.00
Deposits		3,706.175.10
Individual	$3,507,085.07	
Certified Checks.......................	9,071.48	
Cashiers' Checks......................	36,129.48	
Certificates of Deposit.................	52,409.07	
Transient Collections..................	615.00	
United States Deposit..................	100,000.00	
Teller's Due Bills.....................	865.00	
		$5,247,483.46

The Balance Sheet of Life Insurance Companies

The form of the balance sheet required of life insurance companies by the Insurance Department of the State of New York is given here in full detail. It follows the proof of ledger assets, reference to which has been made in the foregoing. It is especially interesting because it divides assets into:

1. a. Ledger **Assets**
   b. Non-Ledger Assets
2. Assets not admitted, which must be deducted from the sum of all the assets in order that the truly available funds may be ascertained.

The term "Non-Ledger Assets" does not refer, as one accountant said in scorn, to assets owned but, for some unknown and discreditable reason, not placed on the books; but to assets accrued which may not be on the books at any time other than the end of the calendar year, if such is the policy of the concern.

Form of Balance Sheet of Life Insurance Company as Prescribed by the Superintendent of Insurance, State of New York

No.	Item	(1) New Business	(2) Renewals				
	LEDGER ASSETS						
1.	Book value of real estate, per Schedule A			$..	...		
2.	Mortgage loans on real estate, per Schedule B, first liens, $....; other than first liens, $....;			...	...		
3.	Loans secured by pledge of bonds, stocks or other collateral, per Schedule C			...	...		
4.	Loans made to policyholders on this company's policies assigned as collateral			...	...		
5.	Premium notes on policies in force, of which $.... is for first year's premiums			...	...		
6.	Book value of bonds, $....; and stocks, $....; per Schedule D			...	...		
7.	Cash in company's office	$..	...				
8.	Deposits in trust companies and banks, not on interest, per Schedule E	...	...				
9.	Deposits in trust companies and banks, on interest, per Schedule E	...	...	...	...		
10.	Bills receivable, $....; agents' balances (debit, $....; credit, $....); net, $....;			...	...		
11.				...	...		
12.	Total Ledger Assets, as per "balance" on page 3					$..	...
	NON-LEDGER ASSETS						
13.	Interest due, $....; and accrued, $.... on mortgages, per Schedule B			$..	...		
14.	Interest due, $.... and accrued, $.... on bonds, per Schedule D, Part 1			...	...		
15.	Interest due, $.... and accrued, $.... on collateral loans, per Schedule C, Part 1			...	...		
16.	Interest due, $...., and accrued, $.... on premium notes, policy loans or liens			...	...		
17.	Interest due, $.... and accrued, $.... on other assets (give items and amounts):			...	...		
18.				...	...		
19.				...	...		
20.	Rents due, $.... and accrued, $.... on company's property or lease			...	...		
21.	Total interest and rents due and accrued					...	...
22.	Market value of real estate over book value, per Schedule A					...	...
23.	Market value (not including interest in Item 14), of bonds and stocks over book value, per Schedule D					...	...
24.	Due from other companies for losses or claims on policies of this company, reinsured					...	...
25.	Gross premiums due and unreported on policies in force December 31, 1912 (less reinsurance premiums)	$.......	$.......				
26.	Gross deferred premiums on policies in force December 31, 1912 (less reinsurance premiums)	....	....				
27.	Totals	$.......	$.......				
28.	Deduct loading	....	....				
29.	Net amount of uncollected and deferred premiums	$.......	$.......			...	...
30.	All other assets (give items and amounts):					...	...
31.						...	...
32.						...	...
33.						...	...
34.						...	...
35.	Gross Assets					$..	...
	DEDUCT ASSETS NOT ADMITTED						
36.	Company's stock owned $....; loans on $....;			$..	...		
37.	Supplies, stationery, printed matter, $....; furniture, fixtures and safes, $....;			...	...		
38.	Commuted commissions, $....; agents' debit balances, gross, $....;			...	...		
39.	Cash advanced to or in the hands of officers or agents			...	...		
40.	Loans on personal security, endorsed or not, $....; bills receivable, $....			...	...		
41.	Premium notes and loans on policies and net premiums in Item 29 in excess of net value of their policies			...	...		
42.	Overdue and accrued interest on bonds in default			...	...		
43.	Book value of Ledger Assets over market value, viz.:			...	...		
44.				...	...		
45.				...	...	...	...
46.	Admitted Assets					$..	...

LIABILITIES, SURPLUS AND OTHER FUNDS

Net present value of all the outstanding policies in force on the 31st day of December, 1912, as computed by the .... on the following tables of mortality and rates of interest, viz.:

1. Actuaries' table at....per cent. on* .... $..

Same for reversionary additions .... $..

2. American Experience table at.... per cent. on* .... $..

Same for reversionary additions ....

3. American Experience table at....per cent. on* .... $..

Same for reversionary additions ....

4. Other tables and rates, viz.:* .... $..

Same for reversionary additions ....

5. Net present value of annuities (including those in reduction of premiums). Give tables and rates of interest, viz.: .... $..

Total .... $..

6. Deduct net value of risks of this company reinsured in other solvent companies ....

7. Reserve to provide for health and accident benefits contained in life policies .... $..

8. Net Reserve (Paid-for basis) .... $..
9. Present value of amounts not yet due on supplementary contracts not involving life contingencies, computed by the ....
10. Liability on policies cancelled and not included in "net reserve" upon which a surrender value may be demanded ....
11. Claims for death losses due and unpaid .... $..
12. Claims for death losses in process of adjustment, or adjusted and not due
13. Claims for death losses incurred for which no proofs have been received
14. Claims for matured endowments due and unpaid ....
15. Claims for death losses and other policy claims resisted by the company
16. Due and unpaid on annuity claims involving life contingencies ....
17. Total Policy Claims ....
18. Due and unpaid on supplementary contracts not involving life contingencies ....
19. Dividends left with the company to accumulate at interest, and accrued interest thereon ....
20. Premiums paid in advance, including surrender values so applied ....
21. Unearned interest and rent paid in advance ....
22. Commissions due to agents on premium notes when paid ....
23. Commissions to agents, due or accrued ....
24. "Cost of collection" on uncollected and deferred premiums, in excess of the loading thereon ....
25. Salaries, rents, office expenses, bills and accounts due or accrued ....
26. Medical examiners' fees $....and legal fees $....due or accrued ....
27. Estimated amount hereafter payable for federal, state, and other taxes based upon the business of the year of this statement ....
28. Advances by officers or others on account of expenses of organization or otherwise
29. Borrowed money $.... and interest thereon $....; ....
30. Unpaid dividends to stockholders ....
31. Dividends or other profits due policyholders, including those contingent on payment of outstanding and deferred premiums ....
32. Dividends declared on or apportioned to annual dividend policies payable to policyholders during 1913, whether contingent upon the payment of renewal premiums or otherwise ....
33. Dividends declared on or apportioned to deferred dividend policies payable to policyholders during 1913 ....
34. Amounts set apart, apportioned, provisionally ascertained, calculated, declared or held awaiting apportionment upon deferred dividend policies, not included in Item 33 ....
35. Reserve, special or surplus funds not included above (give items and amounts separately, and state for what purpose each of said funds is held):
36. ....
37. ....
38. ....
39. All other liabilities (give items and amounts):
40. ....
41. ....
42. ....
43. .... $..
44. Capital stock ....
45. Unassigned funds (surplus) ....
46. Total .... $..

*State definitely the dates of issue and class of policies covered by each basis of valuation.

Balance Sheet of Steam Roads Engaged in Interstate Commerce

The form presented here is nothing more than the expression of the requirements of the Interstate Commerce Commission, as formulated in their pamphlet (first revised issue effective June 15th, 1910) entitled "General Balance Sheet Statements as prescribed by the Interstate Commerce Commission for Steam Roads, in accordance with Section 20 of the Act to regulate Commerce."

BALANCE SHEET STATEMENT

Assets

	Property Investment:	
	I. Road and Equipment:	
B1a	Investment to June 30, 1907:	
	Road	$.......
	Equipment	....
B1b	Investment since June 30, 1907:	
	Road	....
	Equipment	....
	General Expenditures...............	....
	Total Road and Equipment......	$.......
B1c	Reserve for Accrued Depreciation (Cr.)..	....
	Total Road and Equipment......	$.......
	II. Securities:	
B2	Securities of Proprietary, Affiliated, and Controlled Companies—Pledged.......	$.......
B3	Securities Issued or Assumed—Pledged..	....
B4	Securities of Proprietary, Affiliated, and Controlled Companies—Unpledged....	....
	Total Securities................	$.......
	III. Other Investments:	
B5	Advances to Proprietary, Affiliated, and Controlled Companies for Construction, Equipment, and Betterments......	$.......

BALANCE SHEET STATEMENT—*Continued*

B6	Miscellaneous Investments:		
	Physical Property	....	
	Securities—Pledged	....	
	Securities—Unpledged	....	
	Total Other Investments	$.......	
	Total Property Investment		$.......
	Working Assets:		
B7	Cash	$.......	
B8	Securities Issued or Assumed—Held in Treasury:		
	Stocks	....	
	Funded Debt	....	
	Miscellaneous	....	
B9	Marketable Securities:		
	Stocks	....	
	Funded Debt	....	
	Miscellaneous	....	
B10	Loans and Bills Receivable	....	
B11	Traffic and Car Service Balances Due from Other Companies	....	
B12	Net Balance Due from Agents and Conductors	....	
B13	Miscellaneous Accounts Receivable	....	
B14	Materials and Supplies (Depreciation deducted)	....	
B15	Other Working Assets	....	
	Total Working Assets		....
	Accrued Income—Not Due:		
B16	Unmatured Interest, Dividends, and Rents Receivable		....
	Deferred Debit Items:		
B17	Advances:		
	Temporary Advances to Proprietary, Affiliated, and Controlled Companies	$.......	
	Working Funds	....	
	Other Advances	....	
B18	Rent and Insurance Paid in Advance	....	
B19	Taxes Paid in Advance	....	

BALANCE SHEET STATEMENT—*Continued*

B20	Unextinguished Discount on Securities:		
	On Capital Stock....................	....	
	On Funded Debt......................	....	
B21	Property Abandoned, chargeable to Operating Expenses.................	....	
B22	Special Deposits.........................	....	
B23	Cash and Securities in Sinking and Redemption Funds....................	....	
B24	Cash and Securities in Insurance and Other Reserve Funds................	....	
B25	Cash and Securities in Provident Funds..	....	
B26	Other Deferred Debit Items............	....	
	Total Deferred Debit Items................		....
	Profit and Loss:		
B27	Balance		....
	Total		$.......

Liabilities

	Stock:		
B28	Capital Stock:		
	Held in Treasury:		
	Common Stock....................	$.......	
	Preferred Stock..................	....	
	Debenture Stock..................	....	
	Total	$.......	
	Issued and Outstanding:		
	Common Stock....................	$.......	
	Preferred Stock..................	....	
	Debenture Stock..................	....	
	Receipts Outstanding for Instalments Paid	....	
	Total	$.......	
B29	Stock Liability for Conversion of Securities of Constituent Companies.........	$.......	
B30	Premiums Realized on Capital Stock...	....	
	Total Stock..............................		$.......

BALANCE SHEET STATEMENT—*Continued*

	Bonded Mortgage and Secured Debt:		
B31	Funded Debt:		
	Held in Treasury:		
	(a) Mortgage Bonds	$.......	
	(b) Collateral Trust Bonds	....	
	(c) Plain Bonds, Debentures, and Notes	....	
	(d) Income Bonds	....	
	(e) Equipment Trust Obligations	....	
	(f) Miscellaneous Funded Obligations	....	
	Total	$.......	
	Issued and Outstanding:		
	(a) Mortgage Bonds	$.......	
	(b) Collateral Trust Bonds	....	
	(c) Plain Bonds, Debentures, and Notes	....	
	(d) Income Bonds	....	
	(e) Equipment Trust Obligations	....	
	(f) Miscellaneous Funded Obligations	....	
	(g) Receipts Outstanding for Funded Debt	....	
	Total	$.......	
B32	Receivers' Certificates	$.......	
B33	Obligations for Advances Received for Construction, Equipment, and Betterments	....	
	Total Bonded Mortgage and Secured Debt		....
	Working Liabilities:		
B34	Loans and Bills Payable	$.......	
B35	Traffic and Car Service Balances Due to Other Companies	....	
B36	Audited Vouchers and Wages Unpaid	....	
B37	Miscellaneous Accounts Payable	....	
B38	Matured Interest, Dividends, and Rents Unpaid	....	

BALANCE SHEET STATEMENT—*Continued*

B39	Matured Bonded Mortgage and Secured Debt Unpaid........................	....	
B40	Working Advances Due to Other Companies	....	
B41	Other Working Liabilities..............	....	
	Total Working Liabilities..................		....
	Accrued Liabilities—Not Due:		
B42	Unmatured Interest, Dividends, and Rents Payable.......................	$.......	
B43	Taxes Accrued..............................	....	
	Total Accrued Liabilities..................		....
	Deferred Credit Items:		
B44	Unextinguished Premiums on Outstanding Funded Debt....................	$.......	
B45	Operating Reserves....................	....	
B46	Liability on Account of Provident Funds	....	
B47	Other Deferred Credit Items............	....	
	Total Deferred Credit Items................		....
	Appropriated Surplus:		
B48	Additions to Property since June 30, 1907, through Income.....................	$.......	
B49	Reserves from Income or Surplus:		
	Invested in Sinking and Redemption Funds	....	
	Invested in Other Reserve Funds......	....	
	Not Specifically Invested.............	....	
	Total Appropriated Surplus................		....
	Profit and Loss:		
B50	Balance		....
	Total		$.......

In departing from generally accepted accounting classifications, the commission has fulfilled excellently its purpose, which was to control the presentation of facts by steam roads so that it would be possible to judge them all accord-

ing to the same standard. The distinctions made between working assets and deferred debit items are at times a trifle academic, and it is not always easy to explain the reason why certain facts should be in one group, while other facts apparently similar in every respect are to be found in another group. Generally speaking, however, it may be said with propriety that the commissions' requirements have reflected a great amount of light upon the real value of financial facts which, in the past, were included in groups created to act as deflectors or as screens.

The balance sheet of public utility corporations which are under the control of the various public service commissions created by the states of the Union, will not be found to differ greatly in spirit from the form given above for steam roads regulated by the Interstate Commerce Commission. They may, however, adopt a different terminology and perhaps, in a few instances, somewhat alter the requirements of the different groups. The powers of the said commissions in connection with uniform systems of accounting can only be obtained from the statutes creating them, or from amendments thereto brought about by the recommendations of the commissions themselves in their report to the state legislatures.

CHAPTER XXXVII

THE STATEMENT OF INCOME AND PROFIT AND LOSS

Elements of Statement

Speaking of a business enterprise as an abstract proposition, the result of operations discloses: operating profits, operating losses, expense, profit and loss charges, profit and loss credits, income from sources other than operations; deductions from income and profits; adjustments of profits or losses of prior periods.

"Operating Profit" is that part of the trading capital sent out which has returned in excess of the value of the outgo.

"Operating Loss" is that part of the trading capital sent out which has not returned and will not return.

"Expense" is that part of the invested capital which must be given up in exchange for such services as the business requires.

"Profit and Loss Charges" are losses of capital incurred in a particular accounting period otherwise than through operations; they are due to the sale of non-trading assets below the cost thereof; to inefficiency, carelessness, malignity, or dishonesty of employees, or to natural causes over which the administration has no control.

"Profit and Loss Credits" are gains of capital made in a particular accounting period otherwise than through operations or through the regular and expected earnings of invested values.

"Income from Sources Other Than Operations" represents the earnings of capital invested otherwise than to satisfy the requirements of the basic business purpose.

"Deductions from Income and Profits" are the part of his income and profits which the business man must share with others for the use of their wealth in the conduct of his business, or must pay to others as a compensation for the safeguards with which they surround his business interests.

"Surplus or Capital Adjustments" represent the changes which must be made in the net results of the operations of past periods in order that conditions unknown then, but now understood, may not erroneously affect the results of the prior period.

When attempting to express the causes which have brought about operating profits or operating losses, it is necessary to state:

1. The amount of the values which have come in, in exchange for the values which have gone out
2. The amount of the values which have gone out in exchange for the values which have come in

Non-trading concerns call the first group of facts receipts, revenue, operating earnings, or any name which applies unequivocally to the particular operations of the enterprise.

Trading concerns as well as manufacturing concerns engaged in trading, oppose sales to the cost of the goods sold. Accountants have taken the habit of calling sales "income from sales," and deductions therefrom, "deductions from income from sales."

They have been led to this harmless distortion of the meaning of the word "income" by the praiseworthy desire of giving to the statement to be presented by them an anatomical aspect suggestive of logic, clarity, and analytical power.

The marshaling and the grouping of the various elements which constitute the sundry classes of financial facts indicated in the foregoing, is the purpose of the "Statement of Income and Profit and Loss."

Mechanism of Statement

The mechanism of the "Statement of Income and Profit and Loss" is simplicity itself; it is as follows:

1. The income from operations is given at its gross figure. From that gross figure are deducted all the items which have reduced it, either through cancellation of the original transactions, or through partial reductions thereof, or again through expenditures which were positively included in, and deductible from, the amount receivable from operations in accordance with the expressed or implied terms of the contract which made them possible.

2. The cost of obtaining that income, i.e., the operating cost, is given next, in order that by its deduction, the gross profit represented by the excess of the returns over cost may be gauged.

3. The cost of bringing about the conditions which made operations possible follows. When this is deducted the result, in mercantile as well as in manufacturing concerns, is known as the selling profit.

4. If from the selling profit, the cost of administering the business is deducted, the resulting figure is the net income, or the profit from operations.

5. To this profit is added the income obtained from other sources.

6. From the sum of sections 4 and 5, there is deducted the voluntary or unavoidable sharing of income and profits with others who lend their financial or their protective assistance to the business.

7, 8. To the remainder, the profit and loss credits are

added, and from the remainder the profit and loss charges are deducted.

9. The result is the net profit from all sources, for the period.

10. From this net profit there is to be deducted appropriations for contingencies of the future, that is to say, provisions for reserves.

11. To this result there must be added the undivided profits of the prior periods, adjusted by adding thereto, or deducting therefrom, the losses maturing during the present period and denying gains taken as such in a prior period (or vice versa if conditions are reversed).

12. The result is, of necessity, the amount of undivided profits known as "surplus" in corporate balance sheets, and stated at the same figure by the statement showing the financial status. If the concern is a sole proprietorship, or a copartnership, the result of section 10 is added to the capital accounts of the proprietors adjusted as suggested in section 11. The result, then, is the actual equity of the proprietors in their assets, as expressed by the balance sheet.

The following statement of income and profit and loss of the Black Diamond Manufacturing Company* will serve as an illustration:

THE BLACK DIAMOND MANUFACTURING COMPANY

STATEMENT OF INCOME AND PROFIT AND LOSS
FOR THE YEAR ENDED DECEMBER 31, 1913

Income from Sales:	
Gross Sales	$788,968.41
Less Returns	3,434.17
Net Sales	$785,534.24

* See balance sheet given in Chapter XXXV.

STATEMENT OF INCOME—*Continued*

Deductions from Sales:			
Allowances to Customers:			
On Sale Price	$380.10		
On Damaged Goods	276.04		
Freight and Cartage Outward—on Sales	40,300.00		
Stable and Automobile Expense—Proportion Applicable to Sales	7,851.68		
Total Deductions from Sales	$48,807.82		
Income from Sales			$736,726.42
Cost of Goods Sold:			
Manufacturing Cost of Goods Finished During the Period:			
Prime Cost:			
Materials and Supplies Consumed—Including Freight and Cartage thereon	$295,379.01		
Productive Labor	55,316.83		
Total Prime Cost	$350,695.84		
Manufacturing Overhead:			
Superintendence	$7,370.49		
Unproductive Labor	8,221.40		
Heat, Light, and Power	3,677.82		
Factory Expense	8,405.06		
Repairs and Maintenance, Machinery and Tools	5,120.09		
Total Manufacturing Overhead	$32,794.86		
General Factory Overhead:			
Salaries and Wages—Shipping Department	$7,982.36		
Shipping Material Consumed	1,114.77		
Shipping Department Supplies	9.21		
Miscellaneous Shipping Expense	447.86		
Traveling Expense—Shipping Department	275.21		
Stationery and Printing Consumed by Factory	7.53		
Total General Factory Overhead	$9,836.94		
Total Manufacturing Cost for the Period	$393,327.64		
Deduct: Increase of Inventory of Goods in Process as between January 1 and December 31, 1913	....		

STATEMENT OF INCOME—*Continued*

Add: Decrease of Inventory of Goods in Process as between January 1 and December 31, 1913	2,088.36	
Manufacturing Cost of Goods Finished During the Period	$395,416.00	
Inventory Adjustment:		
Deduct: Increase of Inventory of Finished Goods as between January 1 and December 31, 1913, after deduction therefrom of the value of goods distributed free, and used by salesmen	7,954.39	
Add: Decrease of Inventory of Finished Goods as between January 1 and December 31, 1913, after deduction therefrom of the value of goods distributed free, and used by salesmen	....	
Manufacturing Cost of Goods Sold	$387,461.61	
Additional Cost—Freight, Handling and Warehousing of Raw Materials Consumed	4,905.27	
Total Cost of Goods Sold		392,366.88
Gross Profit on Sales		$344,359.54
Selling Expense:		
Salaries of Selling Management	$6,099.12	
Salaries, Commissions, and Expenses of Salesmen	128,650.42	
Advertising Expense	12,033.28	
Free Goods	33,428.14	
Traveling Expense of Sales Manager	1,079.67	
Premiums	1,954.86	
Stationery and Printing Consumed by Office of Sales Manager	416.21	
Special Inducements to Jobbers	2,100.95	
Salesmen's Samples used in demonstration	7,537.88	
Sundry Expense of Sales Office	297.54	
Total Selling Expense		193,598.07
Selling Profit		$150,761.47

STATEMENT OF INCOME—*Continued*

Administrative and General Expenses:		
Administrative:		
Office Salaries	$17,462.91	
General Office Expenses and Supplies	918.45	
Telephones and Telegrams	153.16	
Legal Expense	172.82	
Traveling Expense of Administrative Officers	900.00	
Postage Expense	2,135.54	
Stationery and Printing—Office	530.79	
Heat and Light—Office	918.19	
Miscellaneous	2,012.92	
	$25,204.78	
General:		
Repairs and Maintenance of Buildings	$5,852.39	
Experimental Expense—Processes and New Goods	2,888.49	
Experimental Expense—Machinery	1,288.44	
	$10,029.32	
Total Administrative and General Expense		35,234.10
Profit from Operations		$115,527.37
Additions to Income:		
Interest on Notes Receivable	$2.71	
Sundry Sales of Materials and Empty Containers	1,480.57	
Discounts Gained on Creditors' Accounts (Cash Discounts)	4,700.00	
Interest on Bank Balances	112.10	
Total Additions to Income		6,295.38
Total		$121,822.75
Deductions from Income:		
Taxes, Licenses, and Fees	$2,627.86	
Fire Protection	2,704.99	
Discounts Lost on Customers' Accounts (Cash Discounts)	3,788.15	
Interest and Discounts—Notes Payable	22,131.77	
Collection Fees and Other Bank Charges	71.05	
Total Deductions from Income		31,323.82
Gross Profit and Income from Operating and Other Sources		$90,498.93

STATEMENT OF INCOME—*Continued*

Extraordinary Losses of the Period:		
Frozen Goods	$842.84	
Accounts Receivable—Uncollectable	2,635.55	
Breakage of Carboys and Other Empty Containers Returnable to Shippers	254.77	
Total Extraordinary Losses of the Period		3,733.16
Net Profit for the Year Ended December 31, 1913		$86,765.77
Reserved:		
For Depreciation of Physical Assets	$9,481.39	
For Possible Losses of Accounts Receivable	2,715.34	
Total Reserved		12,196.73
Profit and Loss Surplus at December 31, 1913		$74,569.04
Surplus at January 1, 1913	$171,368.31	
Less Adjustments during the Period:		
Returned Sales of prior periods, and Frozen Goods sold in prior periods, the profit on which figures in the surplus as established at January 1, 1913, including freight and all expenses paid by the Company on such returns	8,652.33	
Net Adjusted Surplus, January 1, 1913		162,715.98
Surplus at January 1, 1914 (as per Balance Sheet of this Company given in the foregoing)		$237,285.02

Comment on the Statement

If the internal anatomy of the statement varies at all, the variations are due, not to elasticity of the mechanism, but to differences of opinion as to the legitimacy of theories which establish the position to be occupied by individual facts.

Some accountants claim that the income from sales is represented by the total of the charges to customers, less:

1–a. The credits taken by them for returns, canceling the sales in part or in full

b. Allowances given to them for shortages, injuries to goods, etc.

c. Trade discounts

2. All expenses which the vendor had agreed to stand in order to consummate the sale, such as the freight, cartage, and other possible delivery expenses to the point where the goods are to be delivered.

Other accountants, on the other hand, while admitting items a, b, and c under 1, deny that under any conditions freight and cartage, expressage, and delivery outward are anything but selling expense, or, in some cases, administrative expenses.

Cash Discounts

Economically speaking, cash discounts given and received measure the ability of the administration to give up part of the income from sales, in order that it may obtain a greater benefit in the settlement of its accounts payable. In other words, cash discounts given are considered as a financial bait intended to induce cash to flow in more readily than the terms of credit give the right to expect, in order that this cash may be used to take advantage of similar offers by creditors. It is said, however, that unless rates of discounts are obtained in a greater amount than they are given, discounts on both sides are useless. Many accountants, of course, refuse to consider cash discounts otherwise than as deductions from income from sales or from cost of goods.

Cost of Goods

The section of the statement which contains the cost of the goods sold is the one which gives rise to the widest differences of opinion. Speaking of the cost of manufactured goods, some accountants claim that it is represented by:

1. Pre-process cost, i.e., freight inward, handling and store charges
2. Material consumed
3. Labor expended
4. Manufacturing overhead applicable on some legitimate basis, and including, among other items, repairs to machinery and tools and depreciation thereof
5. General factory overhead applicable as above and including rent, actual or theoretical, of factory space, interest on capital invested in the factory, taxes on factory building, fire protection of the manufacturing property, etc.

An equally positive group of accountants deny that depreciation, being at best an estimate, can be charged to cost of goods which, supposed to be accurately positive, cannot afford to deal with estimates. They claim, further, that interest on the investment in physical assets necessary to the proper conduct of the business, is cost to the buyer of the goods, and is, as such, properly included in the sale price of the goods offered for sale, but is not cost of manufacture.

Interest as an Element of Cost

Among all these theories, the business man often loses his way; he reads a book on cost-finding advocating the inclusion of interest and theoretical rent among the components of the cost of goods, and he adopts the theory, until it is pointed out to him that theoretical rent and theoretical interest, when added to cost, must be taken as income; that if the closing inventory is large, it is inflated by theoretical values which, reflected in the income, make him subject to a revenue tax greater by a certain percentage of the theoretical values than the amount which he would otherwise pay. Then, realizing that he has actually received neither rent nor interest, he is not quite so sure of the

infallibility of his author's views. If proper appreciation of one's welfare is able to settle the odious controversies into which accountants have been dragged concerning interest applicable to cost, the Federal Government should be thanked for taxing income.

Book Increase of Cost

It is undeniable that when the creation of a new department is contemplated by a business enterprise, and it is desired to compute the probable cost of the new departure, it is proper to include in the statistical computations every item which may represent a possible channel of outgo for capital; but much of the data thus marshaled is only statistical, and has no value as financial fact, when weighed upon the scales of actuality. We have all heard the argument to the effect that when a man goes into business he expects to secure a capital return at a rate which, after deduction therefrom of what his capital would produce if invested in securities, will appear fair to him. According to this, if an individual, by investing his wealth in a business enterprise, makes 10% on his investment, he has the right to say: "I could make 6% by investing in bonds and mortgages; the difference is not worth my while." With such an argument to defend his idleness a man would command little respect; and yet, by charging cost of goods with interest lost by investing wealth in capital assets, we end by reducing the gross profits on sales to a percentum which may lead to a disastrous conclusion. But the worst of it all is that, contrary to the principle of business which states that with the efflux of years, carrying experience in its wake, the cost of manufacturing should steadily become smaller, the inclusion of theoretical interest in cost makes such cost climb upwards in direct ratio with the increase of physical assets. Thus, the more profits we reinvest in the business in a physical way, the more it costs us to manufacture.

In the example of the statement of income submitted above, taxes and fire protection have been treated as deductions from income. This is in accordance with the tenets of the economic theory of income, which state that everything which one pays out for the protection of the capital represented by physical assets, is equivalent to voluntary sharing of one's income with some one else willing to give his services in return for proper compensation.

Statement in Account Form

The statement of income presented on pages 433-437 could be prepared in account form instead of in report form without losing any of its value, lucidity, or analytical power. The truth of this assertion will be demonstrated by the following skeleton:

THE BLACK DIAMOND MANUFACTURING COMPANY

PROFIT AND LOSS ACCOUNT

FOR THE YEAR ENDED DECEMBER 31, 1913

Cost of Goods Sold.....	$.......	Income from Sales:	
Gross Profit on Sales...	....	Sales	$.......
		Less Deductions......	....
	$.......	Net Sales............	$.......
Selling Expense........	$.......	Gross Profit on Sales (brought down)......	$.......
Selling Profits..........	....		
	$.......		$.......
General and Administrative Expense..........	$.......	Selling Profits (brought down)	$.......
Profit from Operations..	....		
	$.......		$.......

The Black Diamond Manufacturing Company
Profit and Loss Account
For the Year Ended December 31, 1913—*Continued*

Deductions from Income	$.......	Profit from Operations (brought down).......	$.......
Gross Profit and Income from operating and other sources.........	....	Additions to Income....	....
	$.......		$.......
Profit and Loss Debits..	$.......	Gross Profit and Income from operating and other sources (brought down)	$.......
Net Profit for the Period	....	Profit and Loss Credits..	....
	$.......		$.......
Appropriations for Reserves	$.......	Net Profit for the Period (brought down)......	$.......
Profit and Loss Surplus for the Period........	....		
	$.......		$.......

Surplus

1913			1913		
Dec. 31	Adjustments....	$.......	Jan. 1	Balance	$.......
	Balance	....	Dec. 31	Adjustments ...	....
			" "	Profit and Loss.	....
		$.......			$.......

Statement for Steam Roads Engaged in Interstate Traffic

This statement is divided into two distinct sections, one for income and one for profit and loss.

The income section has a skeleton of which the following are the most important parts:

1.	Railway Operating Income	$.......
2.	Other Income	....
	1 plus 2 = Gross Income (or Loss)	$.......
3.	Deductions from Gross Income	....
	Remainder is Net Income (or Loss)	$.......
4.	Disposition of Net Income	....
	Remainder, transferred to debit or credit of Profit and Loss	$.......

The skeleton of the profit and loss section is as follows:

Credits:

	Balance at beginning of fiscal period	$.......
1.	Credit Balance transferred from Income Account	....
2.	Profit on Road and Equipment Sold	....
3.	Delayed Income Credits	....
4.	Miscellaneous Credits	....
	Balance carried to General Balance Sheet	$......

Debits:

	Balance at beginning of fiscal period	$.......
5.	Debit Balance transferred from Income Account	....
6.	Appropriations of Surplus to Sinking and Other Reserve Funds	....
7.	Dividend Appropriations of Surplus	....
8.	Appropriations of Surplus for additions and betterments	....
9.	Appropriations of Surplus for new lines and extensions	....
10.	Stock Discount extinguished through Surplus	....
11.	Debt Discount extinguished through Surplus	....
12.	Miscellaneous Appropriations of Surplus	....
13.	Loss on Retired Road and Equipment	....
14.	Delayed Income Debits	....
15.	Miscellaneous Debits	....
	Balance carried to General Balance Sheet	$.......

So far as the income statement is concerned, the first section is of great interest because it opposes:

1. Rail operating revenues to rail operating expenses.

2. Auxiliary operating revenues to auxiliary operating expenses, and adds the net result of the latter group of opposing items to the net result of the former group.

Under the heading "Disposition of Net Income," there are given:

1. Appropriations of income for sinking and other redemption funds
2. Dividend appropriations of income
3. Appropriations of income for additions and betterments
4. Appropriations of income for new lines and extensions
5. Stock discount extinguished through income
6. Miscellaneous appropriations of income

It will be noted with interest that the requirements of the Interstate Commerce Commission demand a strict differentiation between income and surplus. It is to be hoped that American accountants, when presenting statements supposed to be analytical and enlightening, will have for the meanings of accounting facts, the respect which they deserve. It is well enough for the majority of us to treat all transactions of a period which have resulted in a gain, a loss, a revenue expenditure, or an appropriation of profits, as debits or credits to the Profit and Loss account. It is also quite satisfactory to many that capital expenditures be recorded on the credit side of the account which produced the funds. But our statements too often fail to show that some losses and gains affect past profits undistributed; that some expenditures have been made out of current profits reinvested; that dividends have been declared out of current profits; that reserves of the past have been consumed during the current period. We are far too prone to treat a statement of results as an accumulation of figures which must

balance "by hook or by crook" and are too willing to intrench ourselves behind our supposed mastery of a science the very elements of which we do not always know.

Statement of Cash Receipts and Disbursements

Many accountants believe that this statement is merely a recital, more or less logical, of the cash transactions of the period; and still a greater number believe that it is a useless duplication of figures given in full detail by the cash book. And yet, it is more than true that the cash book carries forward no individual amount of prior transactions; that few cash books can be provided with enough columns to give a clear idea of the transactions which they record, and that a clear and purposeful résumé of the all-important cash transactions of a given period may be as interesting to the officers of a concern as the other financial statements presented. To illustrate this point the statement of cash receipts and cash disbursements of the Black Diamond Manufacturing Company, for the six months ended December 31, 1913, is given below:

BLACK DIAMOND MANUFACTURING COMPANY

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS

Debits—Cash Received:		
1. From the Collection of Current Assets:		
Customers' Accounts	$366,487.14	
Claims against Transportation Companies	2,183.93	
Notes and Loans Receivable, and Interest thereon	1,427.49	$370,098.56
2. From the Sale of Working Assets:		
Materials and Supplies Sold to Employees	$59.01	
Carboys and Empty Containers	1,000.00	1,059.01
3. From the Incurrence of Liabilities:		
Notes and Loans Payable	$153,016.34	
Deposits by Employees	15.00	
Credit Accounts of Officers	2,106.10	155,137.44

CASH RECEIPTS AND DISBURSEMENTS—*Continued*

4. From Miscellaneous Sources:		
Fire Insurance Premiums Refunded......	$10.05	
Dividends on Mutual Fire Policies.......	364.38	
Refunds by Creditors, for overpayments and allowances not deductible from bills	6.15	380.58
5. Total Receipts for Period..........................		526,675.59
6. Balance on Hand, July 1, 1913......................		7,643.05
7. Total Debits....................................		$534,318.64
Credits—Cash Disbursed:		
1. For Liabilities Liquidated:		
To Creditors...........................	$171,350.29	
" Employees—for Wages..............	42,650.19	
" Banks for Loans and Notes..........	177,589.99	
" Mortgagee—for Reduction of Mortgage	19,000.00	$410,590.47
2. To Interest on Indebtedness..........................		6,251.07
3. For Reduction of Credit Accounts of Officers..........		9,680.15
4. For Pre-Process Cost of Goods Manufactured:		
Freight and Cartage Inward and Handling Charge...		3,882.44
5. For Factory Overhead Expenses:		
Automobile Expense....................	$317.80	
Warehouse Charges and Cartage..........	40.25	
General Expense of Factory.............	150.05	
Miscellaneous Shipping Expense.........	1,040.65	1,548.75
6. For Selling Expenses:		
Salaries and Commissions of Salesmen...	$58,115.40	
Advertising Expense....................	10,251.53	
Special Commissions to Jobbers.........	222.66	68,589.59
7. For General and Administration Expense:		
Salaries	$12,000.00	
Postage Expense........................	1,398.89	
Telephone and Telegrams..............	93.06	
Traveling Expense of Officers............	450.06	
Legal Expense..........................	1,027.59	
Miscellaneous Expense..................	33.42	15,003.02
8. Total Cash Disbursements for Period................		515,545.49
9. Balance on Hand, December 31, 1913..................		18,773.15
10. Total Credits....................................		$534,318.64

CHAPTER XXXVIII

THE CONSOLIDATED BALANCE SHEET

"Consolidation" and "Consolidated" Balance Sheets

When it is desired to gather together the assets and the liabilities of several companies which it is proposed to consolidate, the resulting balance sheet is called a "Consolidation of the Balance Sheets of Companies A, B, C," etc., at a given date. The process is very simple, consisting merely in expressing in one amount the assets and the liabilities of the various units. Thus, if Companies A, B, and C have a capital stock of $1,000,000 each, the capital stock of the three companies together is given as $3,000,000. The object of such a balance sheet is to show:

1. The assets which will enter the combination.
2. The liabilities to be liquidated out of them.
3. The total equity of the stockholders taken as a whole, in order that the probable amount of the new capital stock to be issued if the consolidation takes place, may be estimated.

In contradistinction, the term "consolidated" is made to apply to balance sheets which attempt to show to the owners of the stock of a company holding the stock of others, the exact status of the assets which they control, and of the liabilities to be met out of the assets.

The purpose of holding companies is to acquire the control of the stock of operating companies and to receive as their income the income of these companies. It is

plain, of course, that behind the financing scheme there lies an internal organization created with the object of reducing, through systematic and enlightened management, the cost of operating the controlled companies. It is also evident that, in principle, the financing of a weak member of the community of components, can be attended to much more economically through internal channels than it can by means of outside assistance. Thus, it is not infrequent to find on the balance sheet of a controlled company an asset which is the liability of another controlled company. The situation created by such internal financing, while not in the least peculiar, is interesting because it raises the question of accounting by offsets.

If a father had intrusted the management of $300,000 of personal property to three of his sons, in equal amount, they to enjoy the income of the trust, it might be that, at the end of a given period, the marshaling of the units of the principal of the trust fund might show that John had loaned $50,000 to James, who in turn had loaned $25,000 to Charles. But the balance sheets submitted by the three trustees would not in the aggregate reveal anything of great importance to the father, since the fund remains intact. If James repaid John the $50,000 which he owes him, and, in turn, Charles repaid to James the $25,000 loaned by the latter, John's balance sheet would be richer in liquid assets, while that of James and Charles would be poorer in liquid assets and richer in reduction of liabilities; but the father would not have one cent more.

If, then, the components of a holding company, as represented by the stock which the latter controls, have been financed one by the other, all the debts of an individual member which are the assets of another member must be omitted from a statement endeavoring to show the exact status of the assets controlled by the parent company.

Form of Consolidated Balance Sheet

The following problem taken from the New York C.P.A. examination of January, 1913, is brought in as a basis for the preparation of a consolidated balance sheet:

Company C was incorporated in May, 1910, to acquire the stock of Companies A and B. Company C's capital stock is divided into preferred, $2,500,000, common, $1,500,000; all the stock is outstanding and fully paid; it has been issued (1) for stock to the stockholders of Companies A and B, (2) $20,000 of preferred for organization expenses, (3) for cash. The stockholders of A and B received preferred stock for the intrinsic, undepreciated book value of the assets, as reflected by the following balance sheets of their companies at June 30, 1910, and $300,000 of common stock divisible equally between Companies A and B.

Assets

Plant Land	$90,000	$195,000
Building and Equipment	254,000	318,000
Machinery and Tools	228,600	276,800
Transportation Equipment	21,000	17,000
Investment in Land	....	150,000
Investment in Bonds—Co. B	60,000	....
Investment—Stocks	200,000	....
Goods in Process	45,000	49,341
Finished Goods	69,000	76,340
Material and Supplies	58,000	51,300
Cash	17,420	19,175
Accounts Receivable	51,000	92,800
Demand Notes—Co. B	5,000	....
Accrued Interest	1,800	....
	$1,100,820	$1,245,756

Liabilities

Capital Stock Outstanding:		
Common	$700,000	$1,000,000
Preferred	100,000	....
6% Bonds, 1915, J. & J. and Interest Accrued	....	92,700

Liabilities—Continued

Accounts Payable	59,800	41,656
Loans Payable	65,800	35,000
Audited Vouchers Unpaid	18,320	13,400
Demand Notes Payable	....	5,000
Reserve for Depreciation	24,900	30,000
Reserve for Doubtful Accounts	5,000	2,000
Reserve for Contingencies	16,000	....
Surplus	111,000	26,000
	$1,100,820	$1,245,756

Between July 1 and July 31, 1910, the following transactions occurred: organization expenses paid in cash by Company C, $5,000; intercompany advances by C: to A, $60,000; to B, $60,000; Company A reduced its accounts payable by $25,000; its loans payable by $30,000 and its audited vouchers by $15,000; Company B reduced its accounts payable by $29,500, liquidated its audited vouchers unpaid and its interest due under the bonds.

The manufacturing operations of the period show: Company A—labor, $10,000; overhead expenses, $8,000; materials consumed, $9,886; inventory of goods in process, $46,300; of finished goods, $50,740; selling expenses paid, $1,600; administration expenses, $2,500; sales, $72,500; collections of open accounts, $86,400. Company B—labor, $3,600; overhead, $2,350; materials, $5,210; inventory of goods in process, $40,500; of finished goods, $46,380; sales, $98,000; collections, $109,150; administration expenses, $3,000.75; selling expenses, $1,040.

No materials were purchased during the period and the current expenses were paid as soon as the invoices were audited. Company A declared a dividend of $100,000 and Company B a dividend of $25,000.

Prepare the consolidated balance sheet of Companies A and B and C, at July 31, 1910, to be submitted to the directors of Company C and so arranged as to show them the exact detail of the properties that they control.

SOLUTION

CONSOLIDATED BALANCE SHEET OF COMPANIES A, B, C, AT JULY 31, 1910

Assets

	Company A	Company B	Company C	Eliminations and Additions*	Consolidated Balance Sheet
	$ 90,000.00	$ 195,000.00			$ 285,000.00
Equipment	254,000.00	318,000.00			572,000.00
Tools	228,600.00	276,800.00			505,400.00
Equipment	21,000.00	17,000.00			38,000.00
				$514,900.00†	514,900.00
Land		150,000.00			150,000.00
Bonds of Company B	60,000.00			60,000.00‡	
Stocks of Other Companies	200,000.00		$2,314,900.00	2,314,900.00§	200,000.00
	$ 853,600.00	$ 956,800.00	$2,314,900.00	$1,860,000.00	$2,265,800.00
Working and Trading Assets:					
Materials and Supplies	$ 48,114.00	$ 46,090.00			$ 94,204.00
Goods in Process	46,300.00	40,500.00			86,800.00
Finished Goods	50,740.00	46,380.00			97,120.00
	$ 145,154.00	$ 132,970.00			$ 278,124.00
Current Assets:					
Cash	$ 73,520.00	$ 132,734.25	$1,540,100.00		$1,746,354.25
Accounts Receivable	87,100.00	31,650.00			118,750.00
Demand Notes, Company B	5,000.00			$ 5,000.00‡	
Accrued Income	300.00			300.00‡	
Advances to Affiliated Companies			120,000.00	120,000.00‡	
Dividends Receivable			125,000.00	125,000.00‡	
	$ 115,920.00	$ 214,384.25	$1,785,100.00	$ 250,300.00	$1,865,104.25
Deferred Debit Items:					
Organization Expense			$ 25,000.00		$ 25,000.00
	$1,114,674.00	$1,304,154.25	$4,125,000.00	$2,110,300.00	$4,438,528.25

NOTE: For footnote references, see page 452.

CONSOLIDATED BALANCE SHEET—*Continued*

Liabilities

	Company A	Company B	Company C	Eliminations and Additions*	Consolidated Balance Sheet
Capital Liabilities:					
Capital Stock Outstanding:					
Preferred	$ 100,000.00		$2,500,000.00	*$ 100,000.00‡*	$2,500,000.00
Common	700,000.00	$1,000,000.00	1,500,000.00	*1,700,000.00‡*	1,500,000.00
Bonds, 6% 1915, J & J		90,000.00		*60,000.00‡*	30,000.00
	$ 800,000.00	$1,090,000.00	$4,000,000.00	*$1,860,000.00*	$4,030,000.00
....		$ 5,000.00		*$ 5,000.00‡*	
....	$ 35,800.00	35,000.00			$ 70,800.00
Companies	60,000.00	60,000.00		*[illegible]‡*	
....	34,800.00	12,156.00			46,956.00
....	3,320.00				3,320.00
....	100,000.00	25,000.00		*[illegible]‡*	
...onds		450.00		*300.00‡*	150.00
	$ 233,920.00	$ 137,606.00		*$ [illegible]*	$ 121,226.00
Surplus:					
1. Appropriated:					
Reserve for Depreciation	$ 24,900.00	$ 30,000.00			$ 54,900.00
Reserve for Doubtful Accounts Receivable	5,000.00	2,000.00			7,000.00
Reserve for Contingencies	16,000.00				16,000.00
	$ 45,900.00	$ 32,000.00			$ 77,900.00
2. Available for Dividends	34,854.00	44,548.25	$ 125,000.00		204,402.25
	$ 80,754.00	$ 76,548.25	$ 125,000.00		$ 282,302.25
	$1,114,674.00	$1,304,154.25	$4,125,000.00	*$2,110,800.00*	$[illegible]433,528.25

* Italics indicate eliminations.
† Composed of:

Excess of cost over intrinsic value of assets of A and B		$300,000.00
Surplus of A and B:		
a. Appropriated for reserves.	$ 77,900.00	
b. Available for dividends.	137,000.00	214,900.00
		$514,900.00

‡ ...nd B purchased by Company C
... the net assets received for this
... in the balance sheet.

Formation of Consolidated Balance Sheet

A discussion of the foregoing solution will be sufficient to clear up the supposed intricacies of the consolidated balance sheet. Before proceeding, however, it may be well to present the ledger accounts of the three companies, built up from the facts given by the text of the problem. These are given in order to show how the closing facts are obtained.

Ledger Accounts

Company A

Cash

Balance	$17,420.00	Accounts Payable......	$25,000.00
Company C...........	60,000.00	Loans Payable.........	30,000.00
Accounts Receivable...	86,400.00	Audited Vouchers......	15,000.00
Interest on Bonds......	1,800.00	Labor	10,000.00
		Factory Expense.......	8,000.00
		Selling	1,600.00
		Administration Expense	2,500.00
		Balance	73,520.00
	$165,620.00		$165,620.00
Balance	$73,520.00		

Goods in Process

Balance	$45,000.00	Finished Goods........	$26,586.00
Materials and Supplies..	9,886.00	Inventory	46,300.00
Cash—Labor	10,000.00		
Cash—Factory Expense	8,000.00		
	$72,886.00		$72,886.00
Balance	$46,300.00		

Profit and Loss

Finished Goods........	$44,846.00	Sales	$72,500.00
Selling Expense........	1,600.00	Interest on Bonds......	300.00
Administration Expense	2,500.00		
Surplus	23,854.00		
	$72,800.00		$72,800.00

Finished Goods

Goods in Process......	$26,586.00	Inventory	$50,740.00
Balance	69,000.00	Profit and Loss........	44,846.00
	$95,586.00		$95,586.00

Surplus

Dividends	$100,000.00	Balance	$111,000.00
Balance	34,854.00	Profit and Loss........	23,854.00
	$134,854.00		$134,854.00
		Balance	$34,854.00

Company B

Cash

Balance	$19,175.00	Accounts Payable......	$29,500.00
Company C............	60,000.00	Audited Vouchers......	13,400.00
Accounts Receivable....	109,150.00	Interest on Bonds......	2,700.00
		Labor	3,600.00
		Factory Expense.......	2,350.00
		Selling	1,040.00
		Administration Expenses	3,000.75
		Balance	132,734.25
	$188,325.00		$188.325.00
Balance	$132,734.25		

Goods in Process

Balance	$49,341.00	Finished Goods	$20,001.00
Materials and Supplies	5,210.00	Inventory	40,500.00
Cash—Labor	3,600.00		
Cash—Factory Expense	2,350.00		
	$60,501.00		$60,501.00
Balance	$40,500.00		

Profit and Loss

Finished Goods	$49,961.00	Sales	$98,000.00
Selling Expense	1,040.00		
Administration Expense	3,000.75		
Interest on Bonds	450.00		
Surplus	43,548.25		
	$98,000.00		$98,000.00

Finished Goods

Goods in Process	$20,001.00	Inventory	$46,380.00
Balance	76,340.00	Profit and Loss	49,961.00
	$96,341.00		$96,341.00

Surplus

Dividends	$25,000.00	Balance	$26,000.00
Balance	44,548.25	Profit and Loss	43,548.75
	$69,548.25		$69,548.25

Company C

Cash

Preferred Capital Stock	$465,100.00	Advances	$120,000.00
Common Capital Stock	1,200,000.00	Organization Expenses	5,000.00
		Balance	1,540,100.00
	$1,665,100.00		$1,665,100.00
Balance	$1,540,100.00		

Capital Stock—Preferred

Preferred Capital Stock Authorized	$2,500,000.00	Investment in Stocks	$956,900.00
		Investment in Stocks	1,058,000.00
		Organization Expenses	20,000.00
		Cash	465,100.00
	$2,500,000.00		$2,500,000.00

Capital Stock—Common

Common Capital Stock Authorized	$1,500,000.00	Investment in Stocks	$300,000.00
		Cash	1,200,000.00
	$1,500,000.00		$1,500,000.00

Investments in Stocks of Other Companies

Preferred Capital Stock	$956,900.00	Balance	$2,314,900.00
Preferred Capital Stock	1,058,000.00		
Common Capital Stock	300,000.00		
	$2,314,900.00		$2,314,900.00
Balance	$2,314,900.00		

The points of interest in the foregoing problem appear to be:

1. The amount of cash which has been obtained by Company C through the issue of stock is not given; and since the amount of stock issued by C in exchange for the capital stock of A and B is not mentioned, the accurate building up of the cash account of C depends upon the understanding of what constitutes "intrinsic, undepreciated book value of the assets."

2. The good-will which, so far as C is concerned, represents the difference between the intrinsic book value of the assets and the price paid for the stock of A and B, i.e., \$300,000, will have to be expressed in the consolidated balance sheet at a figure which can be obtained only from careful consideration of its components.

3. All the intercompany holdings will have to be eliminated from the consolidation, upon the ground that this exclusion will not in any way alter the status of a single one of the assets of A and B controlled by C. If this test cannot be applied to a proposed eliminiation, it should not be made.

1. The Amount of the Issues of Stock for Cash. The term "intrinsic, undepreciated book value" means all the assets of A and B, as appearing on the balance sheets submitted, less their liabilities to outsiders, no cognizance whatever being taken of the reserves. Thus, since the intrinsic, undepreciated book value of the assets of A and B is in the aggregate \$2,014,900, this amount of preferred stock was issued by C to the stockholders of A and B. Further, if \$20,000 of the same stock was issued for organization expense, the company must have received \$465,100 in cash for the balance. As to the common stock, it is plain that the price paid in stock by Company C for the excess of cost over intrinsic value being \$300,000, the

balance of the authorization, i.e., $1,200,000, was issued for cash.

2. The Component Parts of the Good-Will.

The assets of A and B, as appearing in the balance sheets of these two companies at June 30, 1910, aggregate.........	$2,346,576.00
Deducting from this figure the amount which has been acquired through the use of credit, i.e., through the incurrence of liabilities to outsiders......................	331,676.00
We obtain an amount of................................	$2,014,900.00
Which represents, according to principles of accounting... of assets acquired through the use of the capital contributions of the stockholders, as evidenced by the capital stock liabilities of the two companies.	1,800,000.00
Deducting the capital stock we have a remainder of......	$214,900.00
which cannot be anything else than the assets acquired by companies A and B through the reinvestment of their undivided profits of prior periods, as measured by:	
1. The surplus available for dividends..................	$137,000.00
2. The surplus appropriated for the purpose of reserves..	77,900.00
	$214,900.00

Thus we have found two of the components of the good-will acquired by Company C. As to the third, it must of necessity be the $300,000 of common stock issued by C in excess of the intrinsic value of the assets of A and B. To prove that the resulting figure of $514,900, which is called good-will on the consolidated balance sheet submitted above, is truly what it pretends to be, let us assume that, instead of expressing its investment in stocks of other companies at cost, as appears to have been done, Company C had expressed it at the par of the stocks acquired. The journal entry, under these circumstances, would have been:

Investment in Stocks of Other Companies...		$1,800,000.00	
Good-Will		514,900.00	
To Capital Stock—Preferred.....			$2,014,900.00
" Capital Stock—Common......			300,000.00
For acquisition of the stock of companies A and B, the good-will being represented by:			
1. Undivided profits........	$137,000.00		
2. Appropriations of surplus	77,900.00		
3. The good-will value of the investment covers the intrinsic value of the assets acquired.........	300,000.00		
	$514,900.00		

3. The Eliminations. Irrespective of their importance to Companies A and B in their capacity as separate entities, the debts of A to B and of B to A are nothing to C, who owns the stock of both. It is plain that if, for instance, the demand notes held by A against B were to be repaid by the latter, A would have more cash, and less claims against other companies, while B would have less cash, and a lesser amount of liabilities to outsiders. But it is also evident that the consolidation of the cash account of A, B, and C would give a figure absolutely identical with the one shown in the balance sheet, i.e., $1,746,354.25, which is the true extent of C's control of available cash. If the same reasoning is applied to any one of the eliminations shown in the above solution, the same result will be obtained.

The investment in stocks of other companies as carried by C in its balance sheet, must be eliminated because, instead of expressing the amount of the investment, it is required that the assets which it controls, subject to whatever liabilities attach to them, be expressed in detail. The elimination of the capital stock of Companies A and B

is indicated by logic. If the said stock originally controlled the assets of A and B, and has since been replaced by the stock of C, it is only the latter which controls the assets; the former is a nonentity to C for purposes of a consolidated balance sheet. It represents only documentary evidence of the transfer of the assets which were originally acquired out of it.

CHAPTER XXXIX

THE STATEMENT OF AFFAIRS

Appointment of Receivers

The term "financial embarrassment" suggests to many people the state of insolvency and consequent receivership. And yet the appointment of receivers by courts of equity is looked upon as an extreme measure, only to be resorted to when the courts are convinced that such action is essential to secure properties from waste pending readjustment of finances or eventual liquidation. As a matter of law, no receiver is appointed unless the referee in the case has found:

1. That the plaintiff has some right or lien upon the properties at issue.
2. That in principle he has a legal right to consider the property as a fund to be devoted to the satisfaction of his claim, or
3. That the respondent has fraudulently entered into possession of the thing in litigation, or
4. That insolvency is so evident that the assets are in serious danger of being lost through sheer waste, to the prejudice of the creditors.

Status of the Statement of Affairs

To the student of accountancy, the statement of affairs is essentially a receiver's statement. As a matter of fact, neither the receiver nor the assignee is permitted by New York courts to file such a statement.

A receiver may, upon being appointed, ask an accountant to prepare for him a statement showing what are the assets of the concern whose affairs he is to administer, and to what classes of liabilities they are subject; he may further wish to know, as soon as possible, the probable amount of the free assets of which he will dispose for the settlement of unsecured claims. But what is more probable, he will ask for a list of all the assets and of all the liabilities as they stand on the books. Then he will have the assets appraised; he will ask through the courts that all creditors prove their claims and, within a reasonable time, he will file the lists. Subsequently, he will keep such accounts as will permit him to show what he collected on the said assets, and what he paid on the liabilities, as filed.

Thus, so far as the receiver is concerned, the "statement of affairs," which has assumed such importance in C.P.A. examinations, is essentially theoretical. If it has any value at all, it is in other directions.

A concern whose finances have been badly managed may, while actually prosperous if judged by the standard of profits, be compelled to throw itself on the mercy of its creditors for extension of time, or for further credit. Before granting the request, the creditors may ask that a clear insight be given them as to:

1. The financial status of the concern if liquidation of its affairs is deemed advisable.
2. The causes of the conditions which make further credit necessary.
3. The marshaling of the losses so as to show which are due to mismanagement and which to unprofitable trading conditions, and what losses will be incurred by a forced liquidation, if such a drastic action is contemplated.

Thus understood, the theoretical statement of affairs assumes proportions which make it a valuable document

in the hands of creditors, be they laymen or financial institutions. In truth, the statement has no power other than that which it borrows from the power of logic and accounting analysis of the one who prepares it and draws proper conclusions from the arrangement of its otherwise meaningless results in a deficiency account.

Asset Side of Statement

The theoretical form of the statement of affairs is shown on pages 464, 465.

In the form as given the division of the space for "Estimated to Realize" into two columns, is to facilitate the deduction of liabilities from assets, or assets from liabilities, as explained below, and as illustrated by the solution of the New York C. P. A. problem given on page 469.

The theoretical skeleton of the account is as follows:

1. State the assets in the probable order of their realization.

2. Deduct from the appraised value of pledged assets, the amount of the liabilities which they secure in full.

3. Deduct the appraised value of assets partially securing liabilities, from the liabilities to which they are pledged.

4. Total the remainder of the appraised value of the assets.

Liability Side of Statement

1. State the liabilities at the value at which they stand on the books, classifying them as follows:

a. Unsecured Claims
b. Fully Secured Claims
c. Partially Secured Claims
d. Preferred Claims

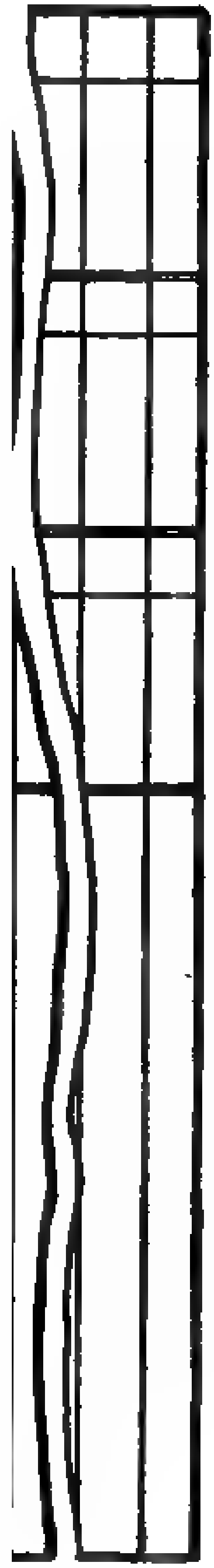

Figure 41a. Form of Statement of Affairs and Deficiency Account (Asset Side)

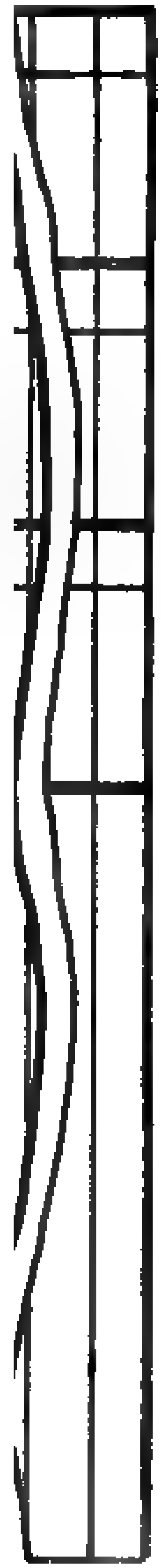

Figure 41b. Form of Statement of Affairs and Deficiency Account (Liability Side)

2. Deduct the fully secured claims from the assets which are pledged to them.

3. Deduct the appraised value of assets partially securing liabilities from the liabilities to which they are pledged, and extend the remainder as unsecured.

4. Deduct the preferred claims from the remainder of the appraised value of the assets as shown by the second column of the space headed "Estimated to Realize."

5. Total the unsecured claims as extended in the second column of the space headed "Expected to Rank."

Bring the statement to a close by establishing either on the asset side, or on the liability side:

1. The amount by which the liabilities unsecured exceed the remainder of free assets, at their appraised value; or
2. The amount by which the remainder of free assets exceeds the unsecured liabilities.

Preparation of Statement of Affairs

The solution of the following problem taken from the New York C.P.A. examination of January, 1912, will illustrate further the theory of the statement of affairs and the deficiency account, and also the method of their preparation.

PROBLEM

Under pressure of financial difficulties the General Contracting Company has applied to its creditors for extension of credit. The creditors' committee has engaged accountants to examine the books, and appraisers to appraise the physical property of the company. The examiners and appraisers are given, as a basis for their work, the following balance sheet, prepared by the company's bookkeeper June 30, 1911:

Debits		*Credits*	
Plant and Equipment....	$150,000	Capital Stock Authorized and Outstanding......	$100,000
Horse, Wagon and Harness	3,000	Bond and Mortgage Payable, 6%, due Jan. 1, 1912	85,000
Machinery and Tools...	110,000	Notes Payable..........	35,000
Shop and Hand Tools..	17,000	Audited Vouchers Unpaid	156,000
Materials and Supplies..	38,000	Uncompleted Contracts, Instalments	45,000
Finished Goods.........	5,675	Dividend No. 6 Payable.	5,000
Uncompleted Contracts..	72,300	Wages Accrued.........	2,650
Cash	48,800	Interest Accrued on Bond and Mortgage Payable	425
Accounts Receivable.....	11,150	Interest Accrued on Notes Payable.........	470
Notes Receivable........	15,000	Reserve for Plant and Plant Equipment......	6,000
Accrued Interest on Notes Receivable......	530	Reserve for Machinery and Machine Tools....	5,400
Stationery and Printing..	1,220	Reserve for Shop and Hand Tools...........	1,500
Unexpired Insurance....	280	Reserve for Horse, Wagon and Harness..	1,450
		Reserve for Contract Contingencies	5,200
		Surplus	23,860
	$472,955		$472,955

In due time the accountants render a report which, among other things, contains the following remarks:

"The account 'Finished Goods' represents the inventory, at cost, of certain machines built under contract during the six months of the present accounting period ended June 30, 1911, which the other contracting parties decline to accept, owing to flaws and violations of specifications. The accounts receivable are made up as follows: (a) subject to bona fide and admittedly reasonable claims by customers, for unsatisfactory goods manufac-

tured under contract during prior period, \$3,600; (b) last instalment due this company under contracts of the prior period, completed and delivered, \$7,550; the aggregate amount of these instalments is due August 1, 1911, but is subject to certain guarantees which have subjected the company to fines of \$1,500 on account of defective work; these fines will be deducted from the instalments when due; the balance of the amount of \$7,550 will be collected in due time. The account 'Uncompleted Contracts, Instalments,' represents amounts paid by customers during June, 1911, on certain contracts reaching a specific stage of development. The unexpired insurance premiums would, if the policies were canceled, produce \$160. There exists no liability for discounted notes. The notes receivable on hand are indorsed by responsible parties."

The appraisers report as follows:

"The physical assets of the company, as appraised by us, would produce at forced sale: plant and plant equipment, \$90,000; machinery and tools, \$55,000; shop and hand tools, \$5,000; horse, wagon and harness, \$1,000. The uncompleted contracts would require, to carry them to completion, an expenditure of the following: material, \$10,000; labor, \$7,000; factory overhead, \$3,000, irrespective of general overhead. We are informed by the surety company, who have guaranteed the completion of the contracts, that it will undertake to complete them provided this company will sell them for \$9,000, the amount of materials which we have estimated to be necessary for completion, and provided further, that this company will accept in settlement the cost to it of the contracts as they stand on its books at June 30, 1911, with 4% of the said amount added for profits. The balance of the materials and supplies would produce \$20,000. The finished goods are worth only their scrap value, i.e., \$250. The stationery and printing is worth \$10."

The books of the company show that the contracts in process will, when completed, produce $130,000.

From the above facts prepare:

1. Statement of affairs at June 30, 1911.
2. Deficiency account that will account logically for the losses incurred by the company and by its creditors under the assumption that the creditors are considering favorably the dissolution of the company and the completion of the contracts by the guarantors.

Solution

Statement of Affairs

Assets

		Book Value	Estimated to Realize	
Cash		$48,800.00	....	$48,800.00
Accounts Receivable:				
Good		6,050.00	....	6,050.00
Uncollectable		5,100.00	....	....
Notes Receivable		15,000.00	....	15,000.00
Accrued Interest on Notes Receivable		530.00	....	530.00
Stationery and Printing		1,220.00	....	10.00
Unexpired Insurance Premiums		280.00	....	160.00
Plant and Plant Equipment (reserve for depreciation deducted)		144,000.00	$90,000.00	....
Less Bond and Mortgage Payable:				
Principal	$85,000.00	....	....	....
Interest	425.00	....	85,425.00	4,575.00
Horse, Wagon and Harness (reserve for depreciation deducted)		1,550.00	....	1,000.00
Machinery and Tools		104,600.00	....	55,000.00
Shop and Hand Tools		15,500.00	....	5,000.00
Materials and Supplies:				
To be sold to the Surety Company		10,000.00	....	9,000.00
Balance remaining in store		28,000.00	....	20,000.00

STATEMENT OF AFFAIRS—*Continued*

	Book Value	Estimated to Realize	
Finished Goods..................	$5,675.00	....	$250.00
Uncompleted Contracts...........	72,300.00	$75,192.00*	....
Less Instalments collected thereunder	....	45,000.00	30,192.00
Total	$458,605.00		$195,567.00
Deduct Preferred Claims:			
Wages Accrued.................			2,650.00
Balance available for distribution to unsecured creditors, being 98.19% of their claims, subject to expenses incident to realization and liquidation			$192,917.00
Deficiency, as per Account........			3,553.00
Total			$196,470.00

Liabilities

Unsecured Claims:		As Per Books	Expected to Rank	
Notes Payable:				
Principal		$35,000.00	....	$35,000.00
Interest		470.00	....	470.00
Audited Vouchers Unpaid........		156,000.00	....	156,000.00
Dividends Payable................		5,000.00	....	5,000.00
Fully Secured Claims:				
Bond and Mortgage Payable:				
Principal	$85,000.00			
Interest	425.00	85,425.00	....	....
Deducted from estimated amount to be realized on property pledged		....	$85,425.00	....
Partially Secured Claims (None)				
Preferred Claims:				
Wages Accrued..................		2,650.00	....	....
Deducted from remainder of free assets estimated to be realized..		....	2,650.00	....

* = Cost + 4%

STATEMENT OF AFFAIRS—*Continued*

	As Per Books	Expected to Rank	
Uncompleted Contracts:			
Received in Cash..................	$45,000.00	....	....
Instalments received in cash, deducted from the amount to be realized on such contracts.......	....	$45,000.00	....
Reserves, Capital and Surplus:			
Reserves for Contract Contingencies	5,200.00	....	....
Capital Stock.....................	100,000.00	....	....
Surplus	23,860.00	....	....
Total Book Liabilities, Capital and Surplus	$458,605.00	....	....
Total Deducted from Assets......		$133,075.00	....
Total Unsecured Claims...........			$196,470.00

Preparation of Deficiency Account

From the foregoing facts, supported by the analysis of the accounts and by the appraised valuation of certain assets, the following deficiency account is established:

DEFICIENCY ACCOUNT

Estimated Losses:		***Net Loss, to be sustained by:***		
1. On Realization of Assets:		**1. Unsecured Creditors:**		
Plant and Plant Equipment	**$54,000.00**	**Deficiency, as per statement ....**		**$3,553.00**
Horse, Wagon and Harness	**550.00**	**2. Stockholders:**		
Machinery and Machine Tools......	**49,600.00**	**Capital Stock Outstanding ....**		**100,000.00**
Shop and Hand Tools	**10,500.00**	**Surplus:**		
Materials and Supplies	**9,000.00**	**As per books.**	**$23,860.00**	
Total........	**$123,650.00**	**Add: Transfer of balance of Reserve for Contract Contingencies..**	**100.00**	**23,960.00**
2. Incident to Realization and Liquidation:				
Stationery and Printing	**$1,210.00**			
Insurance Premiums deferred from prior periods.....	**120.00**			
Total........	**$1,330.00**			

DEFICIENCY ACCOUNT—*Continued*

Total Losses Due to or Incident to Realization and Liquidation		$124,980.00	
Operating Losses:			
Defective goods manufactured during this period, under contract, rejected by customers:			
Cost	$5,675.00		
Less estimated scrap value	250.00	$5,425.00	
Less operating gains, 4% on cost of contracts, offered by the Surety Co.		2,892.00	
		$2,533.00	
Loss of Appropriated Surplus:			
Fines incurred for violations of specifications under contracts	$1,500.00		
Allowances to customers for claims under contracts	3,600.00		
Total	$5,100.00		
Less Reserve for Contract Contingencies	5,100.00		
Total Losses		$127,513.00	$127,513.00

Treatment of Reserves

The treatment of reserves in the statement of affairs and in the deficiency account is twofold:

1. Reserves may be deducted from the book value of the assets in order that the remainder, or depreciated book value, when compared with the estimated realization may give the amount of the true loss not provided for.

2. Reserves may be treated on the liability side of the statement as appropriated surplus, and deducted in the deficiency account from the estimated losses said to be due to forced liquidation.

Arrangement of the Statement of Affairs

The arrangement of the statement is, of course, a matter of personal opinion, since we are dealing with theory not consecrated by practice.

1. The assets may be shown on the debit side or on the credit side of the statement.

2. The statement may start with a perfect balance by showing in the "Book Value" column all the open accounts, debits and credits, found in the general ledger; or it may treat only of assets which are to be realized, and of liabilities to outsiders.

3. It may present the liabilities in the order given in the above solution, or it may state them in the order prescribed by the summary of debts and assets to be presented by bankruptcy petitioners; i.e.:

1. Preferred Claims
2. Secured Claims
3. Unsecured Claims
4. Contingent Liabilities
5. Accommodation Paper

Arrangement of Deficiency Account

As to the deficiency account, any arrangement which fails to bring it down to the level of accounting understanding possessed by the average layman, and requires expert explanation for its clear comprehension, is to be condemned whether we deal with theory or with practice.

If the statement of affairs ends with an excess of free assets over and above the amount of unsecured claims, the deficiency account can still be made; but, instead of showing deficiency to meet the claims of outsiders, it is satisfactory to show that deficiency which measures the impairment of the capital of the insiders, be they sole traders, copartners, or stockholders.

CHAPTER XL

REALIZATION AND LIQUIDATION

Method of Closing

Concerns in voluntary liquidation close their books in the usual manner. As the assets are collected the amount of the proceeds is debited to cash and credited to the assets. Excess or deficiency of proceeds is credited or debited to the surplus to be distributed to the stockholders, or to the capital accounts of the proprietors. The liability accounts are closed as the individual items are liquidated; any gain due to a compromise is, of course, credited to Surplus or to Capital account.

When all the assets have been realized and all the liabilities liquidated, the only accounts remaining on the books are, the Cash account, the Capital Stock account, and the Surplus account, if the concern is a corporation, or the Cash account and the capital accounts of the proprietors, if the concern is a sole proprietorship or a copartnership.

In the case of copartnerships, the accounts of the partners are debited with the cash distributed to them individually. This closes the books.

In the case of corporations, the Capital Stock account is debited with the par of the shares returned by the stockholders for cancellation, and the Surplus account is debited with the amount which the stockholders receive, in the ratio of the shares which they hold.

It goes without saying that if the surplus is converted into an impairment of the stock, the amount of the impairment being debited to the Capital Stock account reduces the latter to the exact amount of cash available for distribution.

It is from the above simple closing process that the "Statement of Realization and Liquidation" has been evolved. It is not a practical statement, in the sense that it is probably never used; but as a theoretical statement it has the great advantage of testing the analytic and synthetic powers of the student. It is probably for that reason that the New York Board of C.P.A. Examiners has given the statement of realization and liquidation such prominence in their examinations.

Statement of Realization and Liquidation

The mechanism of this statement is logic pure and simple. It must show:

1. The individual assets to be realized
2. The individual liabilities to be liquidated
3. The amount realized on the assets
4. The amount paid to liquidate the debts
5. The expenses incident to the realization and liquidation
6. The assets not realized
7. The liabilities not liquidated
8. The gains on realization
9. The losses on realization

To show all these factors in a single account and bring them to a balance, requires less ingenuity than belief in the truth of accounting principles and ability to handle delicate accounting mechanisms. In fact, the Realization and Liquidation account is practically a copy of the transactions incident to the liquidation, so arranged as to make it possible for a reader not wholly deficient in accounting

knowledge, to perceive at a glance the nature of the closing operations. If the statement is adequately prepared, one must be able to single out any asset, ascertain its original amount, its increase during liquidation, the proceeds of its sale, and the gain or the loss made on its realization. One must, besides, be in a position to obtain an accurate idea of the aggregate of gains, losses, expenses, and settlements which were made before the affairs of the concern were effectively liquidated.

Preparation of Realization and Liquidation Account

The following problem and its solution will serve as an illustration of the method of preparing the Realization and Liquidation account and the principles involved:

Problem

The Concrete and Blue Stone Construction Company finds itself in the position of having to liquidate, owing to its inability to obtain extension of credit and to borrow money. Its books show at January 30, 1914:

Cash	$2,000.00	1st Mortgage, Land and Building, Interest and Principal	$17,230.00
Land and Buildings	30,000.00	Notes Payable	12,300.00
Plant Equipment	22,600.00	Sundry Creditors	52,340.50
Materials and Supplies Inventory	8,100.00	Salaries Due	2,350.00
Contracts in Process	32,000.00	Taxes Due	120.00
Finished Contracts	7,000.00	Capital Stock Outstanding	45,000.00
Accounts Receivable	5,400.00		
Bonds of Other Companies	11,300.00		
General and Administration Expense	9,340.50		
Profit and Loss	1,600.00		
	$129,340.50		$129,340.50

The account "Finished Contracts" contains charges representing allowances to customers for unsatisfactory

contracts; as an asset, it is worthless. The accounts receivable represent charges made by the company against customers for what the company calls extra work not included in specifications; of the whole amount $3,200 is disclaimed by customers, and will probably be lost. The bonds of other companies were received in settlement of contracts, and are worth about $5,000. They are pledged to secure $6,000 of notes payable. The account "Contracts in Process" represents cost to date; the amount to be received by the company when the contracts are completed is $45,000; but it is estimated that it will require $15,000 to complete said contracts. The sureties on the contracts will provide the amount required; they purchase, for $6,350, the materials and supplies held by the company, and apply them toward the completion of the contracts.

The Cash account shows, at March 30, 1914:

Initial Balance	$2,000.00	Paid on Mortgage:	
Sale of Land and Buildings	29,150.00	Principal	$17,000.00
Sale of Plant Equipment	15,165.40	Interest	250.30
Sale of Materials and Supplies	6,911.10	Paid for Salaries and Wages	2,350.00
Collection of Accounts Receivable	2,741.20	Paid for Taxes	120.00
Received on Contracts Finished by Sureties	31,140.00	Paid to Creditors	52,340.50
Interest Credited on Bank Balances	71.25	Paid at Maturity of Notes	12,300.00
Sale of Bonds	9,100.00	Paid for Expenses of Liquidation	2,938.10
		Balance Paid to Stockholders	8,980.05
	$96,278.95		$96,278.95

Required:

The Realization and Liquidation account, showing clearly what took place.

Solution

Realization and Liquidation Account

Assets to be Realized:		*Liabilities to be Liquidated:*	
1. Book Assets at:		1. Liabilities to Outsiders:	
Cash (Balance)	$2,000.00	1st Real Estate Mortgage	$17,000.00
Land and Buildings	30,000.00	Interest on Mortgage	230.00
Plant and Equipment	22,600.00	Notes Payable	12,300.00
Materials and Supplies	8,100.00	Sundry Creditors	52,340.50
Contracts in Process	32,000.00	Salaries	2,350.00
Accounts Receivable	5,400.00	Taxes	120.00
Bonds of Other Companies	11,300.00		$84,340.50
	$111,400.00		
2. New Assets Obtained Pending Liquidation:		2. Liability to Stockholders:	
Interest on Bank Balances	71.25	Capital Stock	45,000.00
Total Assets	$111,471.25	Total Liabilities, as per books, at	$129,340.50
3. Gains on Realization of Assets:		3. New Liability Incurred During Liquidation:	
(None)		Additional Interest on Bond and Mortgage	20.30
Total Assets	$111,471.25	Total Liabilities	$129,360.80

Liquidation of Liabilities:

1. To Outsiders:		
1st Real Estate Mortgage		$17,000.00
Interest on Mortgage		250.30
Notes Payable		12,300.00
Sundry Creditors		52,340.50
Salaries		2,350.00
Taxes		120.00
		$84,360.80
2. To Stockholders:		
1. Impairment of Capital:		
Allowances on Defective Contracts		$7,000.00
Deficit from Operations:		
Profit and Loss Balance	$1,600.00	
General Expense	9,340.50	10,940.50
Losses on Realization		15,192.30
Expenses of Liquidation		2,938.10
Total		$36,070.90
Less Net Interest Gain		50.95
Balance		$36,019.95
2. Cash Distributed to Stockholders		8,980.05
		$45,000.00
Total Liquidation of Liabilities		$129,360.80
Total		$240,832.05

Realization of Assets:

1. Proceeds:	
Cash (Balance)	$2,000.00
Land and Buildings	29,150.00
Plant and Equipment	15,165.40
Materials and Supplies	6,911.10
Accounts Receivable	2,741.20
Contracts in Process	31,140.00
Bonds of Other Companies	9,100.00
Interest on Bank Balances	71.25
Total	$96,278.95
2. Losses on Realization:	
Land and Buildings	$850.00
Plant and Equipment	7,434.60
Materials and Supplies	1,188.90
Contracts in Process*	860.00
Accounts Receivable	2,658.80
Bonds of Other Companies	2,200.00
	$15,192.30
Total Realization	$111,471.25
Total	$240,832.05

* Contracts in process completed by sureties.

Principles Involved

The foregoing statement may properly be called a synthesis of the results of an analysis. It presupposes that the account "Realization and Liquidation" is raised on the books, and debited with:

1. The assets, the individual accounts with which are closed
2. The new assets representing additional income during liquidation
3. The increase of assets due to gains in realization

and credited with:

1. The liabilities, the individual accounts with which are closed
2. The new liabilities representing additional income charges during liquidation

While this supposition is not true in practice, it is perfectly plausible in theory, and results in gathering into a group account, all the assets to be realized and all the liabilities to be liquidated. At this point, the accounting begins: It must show on the credit side of the account, the exact amount of assets which the first section enumerates in detail on the debit side, care being taken to differentiate between proceeds and losses; it must show on the debit side of the account, the exact amount of liabilities which the first section enumerates in detail on the credit side. The only difficulty to be overcome, is that which is presented by the treatment of losses and expenses.

The losses have been accounted for on the credit side of the account. This is as it should be, since in practice, they would be credited to the individual assets and debited to surplus. But also in practice, debits to surplus represent losses of capital, at least at winding up, and it is therefore evident that the effect of such losses must be recorded in the realization account. Consequently, they

are to be shown as deductions from the liability of the concern to the stockholders. The same is true of expenses incident to liquidation. Thus, when all losses and expenses have been charged to capital stock, there must remain in the cash account a balance equal to the balance of the stock liability.

Peter Post Problem

The Realization and Liquidation account is simple enough when established in connection with concerns attending to the liquidation of their own affairs. In recent years, the account has been made by boards of C.P.A. examiners to apply to the expression of the results of the administration of receivers appointed to rehabilitate concerns financially embarrassed. When carried to such heights, the account is extremely difficult to establish, since it brings about accounting for the multiple mutations of assets due to operations. Witness the following problem given at the New York C. P. A examination of October, 1907:

PROBLEM

The affairs of Peter Post, a manufacturer, were in a very critical condition, for, although he had an unimpaired investment of $62,500, and his books showed a clear increase of $6,022, he owed his trade creditors $25,289 and had only $265 in cash and $4,062 in receivable book accounts on which to rely for funds. The rest of his business estate was tied up in the following chattels which he had acquired in an effort to keep pace with a business growth that had outrun his capital: machinery and tools, $31,497; raw materials, $18,838; partly made goods, $31,562, and finished wares, $7,587. It was also necessary, in order to continue operations, to have immediate cash for pay-rolls and incidental expenses.

A meeting of his principal creditors was called, and, as it appeared that the business was well established, profitable, and had a sure and growing market, they decided to advance him $6,000 in cash for immediate needs and extend his credit in a sufficient amount to permit of the purchase of necessary materials and generally to continue operations till the present stock of materials could be made up and realized on.

In order to insure the proper application of the funds and credit so provided, a trustee was appointed to administer the finances till the creditors' claims were satisfied, at which time the control would revert to the proprietor.

The subsequent operations under the trusteeship were as follows: cash paid for labor, $15,725; for expenses, $5,430; for additional tools, $750; purchases on book account, charged to materials, $6,300; to expenses, $15,000; sales on book account, $72,300; loss on collection of book debts, $380; personal drawings of Peter Post, $3,500.

The unliquidated values at the close of the trusteeship were as follows: inventory of raw materials, $5,000; finished wares, $27,900; accounts receivable outstanding, $3,382; and accounts payable, $89.

Prepare, with due regard to the grouping, order, and arrangement of the items, as best calculated clearly to display the facts, (a) realization and liquidation account, (b) trustee's cash account, (c) balance sheet of business as restored to Peter Post.

SOLUTION

STATEMENT OF THE RESULTS OF THE ADMINISTRATION OF PETER POST

BY..........., TRUSTEE, FROM............TO..........

Section I—Debit Side

Assets Taken from Peter Post:		
Cash	$265.00	
Accounts Receivable	4,062.00	
Machinery and Tools	31,497.00	
Raw Materials	18,838.00	
Goods in Process	31,562.00	
Finished Goods	7,587.00	$93,811.00
New Assets Obtained During Trusteeship:		
Cash—Loan by Creditors	$6,000.00	
Tools—Purchased for Cash	750.00	
Raw Materials—Purchased on Credit	6,300.00	
Sundry Supplies—Purchased on Credit	15,000.00	
Manufacturing Labor—Paid in Cash	15,725.00	
Finished Goods—Completed by Trustee	82,425.00	
Accounts Receivable—Sales by Trustee	72,300.00	198,500.00
Total Assets Taken Over and Acquired		$292,311.00

Operating Gains Made by Trustee:

Excess of Proceeds of Trading Assets Over Cost Thereof:			
Proceeds (Sales)		$72,300.00	
Less Cost of Goods Sold:			
Cost of Goods Completed (see contra)	$82,425.00		
Less Increase of Inventory of Finished Goods	20,313.00		
Cost of Goods Sold		62,112.00	10,188.00
Total with which Trustee is chargeable			$302,499.00

STATEMENT OF RESULTS—*Continued*

Section II—Debit Side

Disposal of Liabilities:		
1. Liabilities Liquidated:		
Trade Creditors		$52,500.00
2. Liabilities Returned to Peter Post:		
Trade Creditors		89.00
Total		$52,589.00
Total Section II		$52,589.00
Total Sections I and II, Debit Side		$355,088.00

Section 1—Credit Side

Liabilities Taken Over:		
Due to Trade Creditors		$25,289.00
New Liabilities Incurred During Trusteeship:		
Accounts Payable:		
Trade Creditors:		
For Cash Loan	$6,000.00	
" Raw Materials	6,300.00	
" Sundry Supplies	15,000.00	27,300.00
Total to be credited to Trustee		$52,589.00

Section II—Credit Side

Disposal of Assets:		
1. Transformed by Manufacturing Process:		
Goods in Process, Initial Inventory	$31,562.00	
Raw Materials	20,138.00	
Sundry Manufacturing Supplies	15,000.00	
Factory Labor	15,725.00	
Total		$82,425.00
2. Sold by Trustee (Finished Goods, Sale Price)		72,300.00

STATEMENT OF RESULTS—*Continued*

3. Expended by Trustee:		
To Liquidate Liabilities	$52,500.00	
" Purchase Tools	750.00	
" Pay for Manufacturing Labor	15,725.00	
" Pay for Expenses	5,430.00	
For Advances to Proprietor, Peter Post	3,500.00	
Total		$77,905.00
4. Lost in Collection:		
Accounts Receivable		380.00
5. Returned to Peter Post, Proprietor:		
Cash	$960.00	
Accounts Receivable	3,382.00	
Machinery and Tools	32,247.00	
Goods in Process (None)		
Finished Goods	27,900.00	
Raw Materials	5,000.00	
Total		69,489.00
Total Section II		$302,499.00
Total Sections I and II, Credit Side		$355,088.00

It will be noticed that the above solution presents, in one single account, all the requirements of the problem, i.e., the trustee's administration of the affairs of Peter Post, the trustee's cash account, and the balance sheet of the business as restored to Peter Post, the latter excluding the capital account of the proprietor, which can readily be ascertained by deducting $89 from $69,489, i.e., $69,400. As the proprietor's capital was originally $68,522, as indicated by Section 1 of the account of the trustee's administration, it becomes evident that the increase of Peter Post's equity in his assets, i.e., $878, has been obtained by the trustee as follows:

Credit:		
Operating Gain..		$10,188.00
Debits:		
Losses of Capital..................................	$380.00	
Expenses of Administration......................	5,430.00	5,810.00
Net Gain..		$4,378.00
Advanced to Proprietor..................................		3,500.00
Increase of Capital during Trusteeship....................		$878.00

As to the principles underlying the account, they are better understood when the entries recorded in the account with the trustee are worked in conjunction with the account of the proprietor.

What the proprietor transfers to the trustee, is nothing more than his equity in his assets, represented by the assets less the liabilities to outsiders. Subsequently, all the new assets which are obtained by the trustee, and all the increases of assets must, of necessity, be reflected in the proprietor's account, and, as a consequence, in the trustee's account. Similarly, all decreases of assets and all increases of liabilities must be reflected in the two accounts. In other words, by a series of debits and credits, the two accounts exhibit, step by step, the result of the transactions which took place, (1) at the time of the transfer of assets by the proprietor, (2) pending the trustee's administration, (3) at the time of the discharge of the trustee. Thus, the proprietor's account, which might in all propriety appear on the books of the trustee if the latter kept separate books, would show:

Proprietor's Account

Books of the Trustee

Liabilities taken over by the Trustee	$25,289.00	Assets taken over by the Trustee	$93,811.00
Proprietor's Equity	68,522.00		
	$93,811.00		$93,811.00
New Liabilities incurred by Trustee	$27,300.00	Proprietor's Equity	$68,522.00
Losses made by Trustee.	380.00	New Assets acquired by Trustee	198,500.00
Expenses of the Trustee	5,430.00	Gains made by Trustee	10,188.00
Advances by Trustee	3,500.00	Liabilities liquidated by Trustee	52,500.00
Assets consumed by Trustee	82,425.00	Liabilities returned by the Trustee	89.00
Assets sold by Trustee	72,300.00		
Assets expended by Trustee	68,975.00		
Assets returned by Trustee	69,489.00		
	$329,799.00		$329,799.00

It is true, of course, that in practice the proprietor's account, if kept, would only contain the following entries:

Debits		*Credits*	
Liabilities taken over	$25,289.00	Assets taken over	$93,811.00
Proprietor's Equity	68,522.00		
	$93,811.00		$93,811.00
Losses	$380.00	Proprietor's Equity	$68,522.00
Expenses	5,430.00	Gains	10,188.00
Advances	3,500.00	Liabilities returned	89.00
Assets returned	69,489.00		
	$78,799.00		$78,799.00

But we must not forget that, according to accounting principles, crediting the proprietor with gain is equivalent to crediting him with the assets which he has received and debiting him with the assets with which he has parted to obtain that gain; that the same is true of losses; that debiting the proprietor with expenses is equivalent to debiting him with the assets with which he has parted, instead of with the cost of the benefits which he has received through the incurrence of such expense.

Returning to the solution of the above problem, the reader may perhaps ask why the factory labor expended for the manufacture of goods is to be charged to the trustee, as representing an asset. If, however, he will bear in mind that all the items contributing to cost of goods manufactured for sale are assets until the goods are sold, and can in nowise be treated as expense, he will answer his own question.

The following solution of the Peter Post problem was submitted to the author by a practising accountant as fulfilling its requirements. The solution illustrates the twist which may be given to the theory of accounts.

Peter Post

Statement of Realization and Liquidation

Assets to be Realized		*Liabilities to be Liquidated*	
Per Balance Sheet:		*Per Balance Sheet:*	
Machinery and Tools	$31,497.00	Accounts Payable	$25,289.00
Goods in Process	31,562.00		
Materials	18,838.00		
Finished Goods	7,587.00		
Accounts Receivable	4,062.00		
New Assets:		*New Liabilities:*	
Accounts Receivable	72,300.00	Accounts Payable	27,300.00
Tools	750.00		

Statement of Realization and Liquidation—*Continued*

Liabilities Not Liquidated:		*Assets Not Realized:*	
		Machinery and Tools...	32,247.00
Accounts Payable.......	89.00	Accounts Receivable....	3,382.00
Liabilities Liquidated:		*Assets Realized:*	
Accounts Payable.......	52,500.00	Materials	18,838.00
		Goods in Process.......	31,562.00
		Finished Goods.........	7,587.00
		Accounts Receivable....	72,600.00
		Losses on Realization:	
		Accounts Receivable....	380.00
Supplementary Charges:		*Supplementary Credits:*	
Materials	25,138.00	Sales	72,300.00
Labor	15,725.00	Inventory—Materials ...	5,000.00
Expense	20,430.00	Inventory — Finished Goods	27,900.00
Goods in Process.......	31,562.00		
Finished Goods.........	7,587.00		
Losses on Accounts Receivable	380.00		
Peter Post drawings....	3,500.00		
Profit on Realization and Liquidation	878.00		
	$324,385.00		$324,385.00

Trustee's Cash Account

Balance	$265.00	Labor	$15,725.00
Creditors (Loan).......	6,000.00	Expenses	5,430.00
Accounts Receivable....	72,600.00	Tools	750.00
		Accounts Payable.......	52,500.00
		Drawings Peter Post...	3,500.00
		Balance	960.00
	$78,865.00		$78,865.00
Balance	$960.00		

BALANCE SHEET

Assets		*Liabilities and Capital*		
Machinery and Tools...	$32,247.00	Accounts Payable.......		$89.00
Materials and Supplies..	5,000.00	Capital		62,500.00
Finished Goods.........	27,900.00	Surplus:		
Cash	960.00	Prior to appointment of Trustee	$6,022.00	
Accounts Receivable....	3,382.00	Profit and Loss of Realization and Liquidation.	4,378.00	
			$10,400.00	
		Drawings....	3,500.00	6,900.00
	$69,489.00			$69,489.00

It will be noticed that the foregoing solution charges the trustee, under what is called "Supplementary Charges," with:

Losses of Accounts Receivable....	$ 380.00
Expense of Realization...........	20,430.00
or a total of..................	$20,810.00

with which he cannot be charged under any rules of accounting, and that it carries inconsistency to the extent of debiting the trustee with profit on realization. No matter how lightly one may treat accounting principles, a trustee cannot be charged, at the same time, with profits and losses. As to charging the trustee with the drawings of the proprietor, it is outside of the limits of possibilities.

Nothing but strict adherence to principles will satisfy accounting requirements.

CHAPTER XLI

THE ACCOUNTS OF FIDUCIARIES

Academic Theories

In the course of accounting instruction as offered today, some prominence is given to so-called "Accounts of Executors." When reduced to its accounting expression, such a course consists of little more than a differentiation between principal and income, general data about the duties of executors to the estate, and laboratory work upon the schedules to be presented by the fiduciary in final accounting.

In differentiating between principal and income, the chief principles of the law are given as the standard by which the accounting facts will be judged. This, of course, is as it should be; but unfortunately, the courts have not always been willing to accept the views of accountants upon matters relating to the interests of the life-tenant as opposed to the interests of the remainderman.

In treating of the accounts of the testamentary trustee, a complete set of books is usually evolved, and the student is carefully taught to debit cash and to credit the estate; to credit cash and to debit the estate, etc., etc. Special forms are submitted, which are said to have resulted from the best thought of men who have spent their lives in the treatment of the accounts of fiduciaries.

Statutory Provisions

Coming down to facts, we find that American statutes prescribe no uniform accounting for executors; that these

trustees may keep their books precisely as they will, provided they are able to account properly to the court for their administration of the estate. What the law does attempt to regulate, is the interpretation to be given to the word "assets," that is to say, what shall be included in the inventory to be filed by the executor and be subsequently accounted for by him.

Section 2714 of the New York Code of Civil Procedure, given below, provides that the assets to be inventoried are the personal assets of the deceased.

"The inventory must contain a particular statement of all bonds, mortgages, notes, and other securities for the payment of money belonging to the deceased, known to the executor or administrator; with the name of the debtor in each security, the date, the sum originally payable; the indorsements thereon, if any, with their dates and the sum which, in the judgment of the appraisers, is collectable on each security; and of all moneys, whether in specie or bank bills, or other circulating medium, belonging to the deceased, which have come to the hands of the executor or administrator, and if none have come into his hands, the fact shall be stated in the inventory.

"The naming of a person executor in a will does not operate as a discharge or bequest of any just claim which the testator had against him; but it must be included among the credits and effects of the deceased in the inventory, and the executor shall be liable for the same as for so much money in his hands at the time the debt or demand becomes due, and he must apply and distribute the same in the payment of debts and legacies, and among the next of kin as part of the personal property of the deceased. The discharge or bequest in a will of a debt or demand of the testator against an executor named therein, or against any other person, is not valid as against the creditors of the deceased; but must be construed only as

a specific bequest of such debt or demand; and the amount thereof must be included in the inventory and, if necessary, be applied in the payment of his debts; and if not necessary for that purpose, must be paid in the same manner and proportion as other specific legacies.

"If personal property not mentioned in any inventory come to the possession or knowledge of an executor or administrator, he must cause the same to be appraised as herein required, and an inventory thereof to be returned within two months after the discovery thereof; and the making of such inventory and return may be enforced in the same manner as in the case of a first inventory."

Executor's Accounting

It is around the inventory, as filed, that the accounting of the executor to the courts revolves. He must charge himself with the increases of that inventory, and such increases automatically become part of the total to be accounted for. It is not with the net of the increases, after the deduction of losses from gains, that the executor must charge himself, but with the gross amount. As to the decreases, he must explain them in full in a separate part of his account.

As will be noticed, the section of the law quoted above, refers only to personal property. As a matter of principle, the executor has no right whatever to the possession of real estate, unless it be specifically devised to him in trust. If, however, it is necessary for the executor to collect rentals, or to sell the real estate in order to pay the debts of the testator, the executor of the estate may derive from the statutes, or from the will itself, sufficient authority to proceed.

The accounting by the executor is essentially a matter of schedules, which will be given in the course of the present chapter; but his administration of the estate is

subjected by law to certain rules which he must apply for the protection of all parties at interest, including himself. He must support, by proper vouchers, all disbursements which he makes over and above an amount of $20; and the sum of small payments not supported by proper vouchers must not exceed $500. If, however, a voucher for any sum disbursed has been lost or accidentally destroyed, the sworn statement of the payee, coupled with the justification for the expenditure, will discharge the executor. As evidenced by the order of the schedules which he must submit, the classes of disbursements which the executor is empowered to make are as follows:

1. Funeral and administration expenses
2. The payment of debts owed by the deceased
3. The payments to legatees, widow, or next of kin for their share of the estate as per the will

Payment of Debts and Legacies

As to the payment of the debts of the deceased, the debts preferred by statute must be paid first, and with proper diligence. Generally speaking, these debts are:

1. Duties to the Federal Government on imported goods, etc.
2. Taxes assessed upon the property of the decedent
3. Docketed judgments

The order in which these classes of debts are to be paid is precisely that given above; the executor must pay one class entirely before he may proceed to the others; he must first pay the debts due, but he may simultaneously pay debts not as yet matured, provided he deducts therefrom interest to the maturity of the debt.

As to all the other debts, they constitute a fourth class and are paid according to their maturity. It must be stated, however, that a real estate mortgage cannot be paid out of the personal estate unless the will has so pro-

vided; and it must also be borne in mind that the executor has no right to pay or to revive a debt which has been barred by the statute of limitations.

Concerning legacies, the executor must not pay them before the expiration of one year, unless the will provides otherwise. But even in this case the legacy is paid subject to a bonded liability of the legatee contingent upon the sufficiency of the remainder of the estate to pay the debts of the testator.

The Executor's Compensation

In the State of New York the law provides for the compensation of testamentary trustees in all cases where the will has not specially provided therefor, or where the executor has legally renounced the compensation assigned to him by the will. The amount of such legal compensation, or, as it is more frequently termed, "commissions," is, generally speaking, computed on the amounts received and paid out. The rate is:

On a sum not exceeding \$1,000.......	5%
On a second sum not exceeding \$10,000	2½%
On the remainder, above \$11,000......	1%

While it is a recognized principle that where more than one executor is named, each executor receives commissions according to the services which he renders, there is a provision made by the New York law for the compensation of each executor of an estate valued at \$100,000 or more in personal property over and above all debts. In such cases each executor is entitled to the full commission allowed when only one executor administers the estate. If, however, there are more than three executors, the compensation to which three would be entitled altogether, must be divided among all according to the value of the services rendered by them individually.

Form of Executor's Account

The following form of the account of an executor is in vogue in the Court of the Surrogate of the County of New York:

Surrogate's Court,
County of New York.

In the matter of the judicial settlement of the account of M. T. Fordham, of New York, deceased

To the Surrogate of the County of New York:

I, A. Abner, of the City of New York, in the County of New York, do hereby render the following account of the proceedings as the executor of the estate of the said deceased.

On the .... day of ...., A. D., 191.., I caused an inventory of the personal estate of the said deceased to be filed i~ the office of the Surrogate of the County of New York, which personal estate therein set forth amounts, by appraisement by the appraisers duly appointed, to $13,610.20.

Schedule A, hereto annexed, contains a statement of all the property contained in said inventory, sold by me at public or private sale, with the prices and manner of sale; which sales were fairly made by me at the best prices that could then be had with due diligence, as I then believed; it also contains a statement of all the debts due the said estate and mentioned in said inventory, which have been collected, and also of all interest or moneys received by me for which I am legally accountable.

Schedule B, hereto annexed, contains a statement of all debts in said inventory mentioned, not collected or collectable by me, together with the reasons why the same have not been collected and are not collectable; and also a statement of the articles of personal property mentioned in said inventory, now unsold, and the reasons of the same being unsold, and their appraised value; and also a statement of all property mentioned therein, lost by accident, without any wilful default or negligence, the cause of its loss and its appraised value. No other assets than those in said inventory, or herein set forth, have come to my possession or knowledge, and all the increase or decrease in the value of any assets of said deceased is allowed or charged in said Schedules A and B.

Schedule C, hereto annexed, contains a statement of all moneys paid by me for funeral and other necessary expenses for said estate, together with the reasons and object of such expenditure.

On or about the .... day of .... in the year 191.., I caused a notice for claimants to present their claims against the said estate to me within the period fixed by law, and at a certain place therein specified, to be published in two newspapers, according to law, for six months, pursuant to an order of the Surrogate of the County of New York, to which order, notice, and due proof of publication herewith filed, I refer as part of this account.

Schedule D, hereto annexed, contains a statement of all the claims of creditors presented to and allowed by me or disputed by me and for which a judgment or decree has been rendered against me, together with the names of the claimants, the general nature of the claim, its amount, and the time of the rendition of the judgment; it also contains a statement of all moneys paid by me to the creditors of the deceased, and their names, and the time of such payment.

Schedule E, hereto annexed, contains a statement of all moneys paid to the legatees, widow, or next of kin of the deceased.

Schedule F, hereto annexed, contains the names of all persons entitled as widow, legatee, or next of kin of the deceased, to a share of his estate, with their places of residence, degree of relationship, and a statement of which of them are minors, and whether they have any general guardian, and, if so, their names and places of residence, to the best of my knowledge, information, and belief.

Schedule G, hereto annexed, contains a statement of all other facts affecting the administration of said estate, his rights, and those of others interested therein.

I charge myself as follows:

With amount of inventory........................	$........
" increase, as shown by Exhibit A...	....
Total...............................	$........

I credit myself as follows:

With amount of loss on sales, as per Schedule B....	$........
" debts not collected, as per Schedule B.	....
" Schedule C......................	....
" Schedule D......................	....
" Schedule E......................	....
Total...............................	$........
Leaving a balance of............................	$........

to be distributed to those entitled thereto, subject to the deductions of the amount of commissions, and the expenses of this accounting. The said schedules, which are signed by me, form part of this account.

Schedule A

Cash—From Whom Received and All Necessary Information	Sales of Property and Debts Due Deceased	Rents	Interest	Dividends	Total
U. S. Mortgage and Trust Co.—Cash on Deposit..					
Dime Savings Bank—Cash on Deposit..............					
N. Y. Life Insurance Co.—Policy No. ...., payable to estate.................					
Browner & Simplex—Salary due testator.........					
J. Spruce—Promissory note due this day.............					
S. Turner—Mortgage Bond, Principal and Interest...					
Unknown — 50 shares of Bacillac Co., Dividend declared thereon—on					
Unknown—Personal wearing apparel..............					

(Signed) A. Abner,
Executor of the Estate of
M. T. Fordham, deceased.

Schedule B (4 Parts) Part 1

Property Mentioned in Inventory, Lost by Accident Without Any Wilful Default or Negligence; the Cause of Its Loss and Appraised Value

(None)

Schedule B Part 2

Decrease of the Value of Any Assets of Deceased Mentioned in Inventory

(None)

Schedule B Part 3

Debts Mentioned in Inventory Not Collected or Collectable, With Reasons Why They Have Not Been Collected and Are Not Collectable, and Their Appraised Value

(None)

Schedule B Part 4

Personal Property Mentioned in Inventory Unsold; and the Reasons of the Same Being Unsold, and Its Appraised Value

(None)

SCHEDULE C, D, AND E

Names	Schedule C	Schedule D	Schedule E	
Cash—To Whom Paid, with Reasons and Object of Expenditure	Expenses	Debts Owed by the Deceased	Paid to Legatees, Widow, or Next of Kin of Deceased	Total
Unknown—Funeral Expenses				
" —Legal Expenses...				
Sundry—Executor's Expenses				
Unknown — Rent of Apartment				
T. B. Roe, M.D., Professional services to testator..				
Universal Pharmacy — Drugs for testator				
Miss Spence — Professional services to testator........				
Anna Fordham — Sister of deceased				
Mary Fordham — Mother of deceased				

(Signed) A. ABNER,
Executor of the Estate of
M. T. Fordham, deceased.

SCHEDULE F (2 Parts) Part 1

Persons Entitled as Widow, Legatee, or Next of Kin to the Deceased to a Share of the Estate	Residence	Degree of Relationship
Anna Fordham....................		Testator's Sister
Mary Fordham....................		Testator's Mother
George Tesley		Testator's Nephew
Ruth Tesley......................		Testator's Niece

(Signed) A. ABNER,
Executor of the Estate of
M. T. Fordham, deceased.

SCHEDULE F Part 2

Names of Minors	Name of Guardian	Residence of Guardian
	(None)	

Schedule G

Statement of All Other Facts Affecting the Estate Not Included in Any Other Schedule

Commissions Claimed by A. Abner, Executor:

5%	on 1st	$1,000.00
2½%	on next	10,000.00
1%	on balance	

(Signed) A. Abner,
Executor of the Estate of
M. T. Fordham, deceased.

Contents of Schedules

It will be noticed that Schedule A contains:

In the first column:

The proceeds of the sale of the corpus of the estate; hence, the column contains the corpus as represented by the inventory filed, the increases of such inventory through sales, and also the decreases thereof through sales.

In the second column:

The income derived from the real estate which, either under the provisions of the will or through the necessities of the estate, has come within the control of the executor.

In the third and fourth columns:

The other income earned by the estate.

This means that, in order to charge the executor with the increase of the inventory, it is necessary to refer to the said inventory, and, by comparison, to single out the particular items the proceeds of which have been greater than their appraised value.

As to the losses on sale, represented by the excess of the appraisal over the proceeds, they are stated in Schedule B, which is all the more interesting because it shows:

1. That the class of losses referred to in the summary as "Losses on Sales" is actually composed of two classes of losses:
   a. Losses due to accidents or to causes over which the care and prudence of the executor have no control
   b. Losses due to insufficiency of proceeds when compared with the appraisal made at inventory time
2. That the class of items referred to in the summary as "Debts Not Collected," is actually composed of two classes of facts:
   a. Debts not collected, or not collectable
   b. Inventory items not sold

Differentiation Between Principal and Income

The question of differentiation between principal and income, as affecting the rights of life-tenants and remaindermen, is primarily one of investment accounting. It arises only in cases where the funds out of which the income of the life-tenant is to be paid, have been invested in securities subsequent to the death of the testator.

When accountants have presented their interesting and highly commendable arguments in favor of the judicial interpretation of wills according to scientific principles, it remains true that courts will insist upon an interpretation which is in accordance with the intent of the testator. If he intended that the face value of coupons of interest be paid to the life-tenant, and such intention is made clear by the terms of the will, or by the surrounding circumstances and conditions, it would be unfair to deduct from the proceeds of these coupons a sum which at compound interest would return to the funds of the remainderman the premium paid by the executor on the interest-bearing bonds.

INDEX

Practical Problems

To Accompany "The Applied Theory of Accounts"

PROBLEM I

To illustrate the general principles of corporation accounting, and particularly the mechanism of the corporate journal. (See Chapters III, IV.)

The Goldengate Mining Company has been incorporated to extract silver from veins located in Mexico. The capital stock of the company, which is divided into 30,000 shares of common stock of the par value of $10 per share, is issued March 1, 1916, as follows:

To A. Rosenberger, Incorporator, for cash @ par,	50 shares,	cert. No.	1
" B. Rothschild, " " " " "	50 "	" "	2
" C. Silverstein, " " " " "	50 "	" "	3
" D. Gangloff " " " " "	50 "	" "	4
" John Skeener, Vendor, for land purchased	29,800 shares,	cert's Nos.	5 to 302

On March 4, 1916, John Skeener donates to the company certificates numbers 5 to 204, which are to be placed in the treasury, and sold to acquire working capital. During March and April, the following stock transactions occur:

March 5,	Sold out of treasury to John Doe	1,000 shares	@ $8.50
	" " " " " V. Roe	500 "	" $8.50
March 7,	" " " " " Y. Kalisher	400 "	" $8.60
	" " " " " Peter Henry	5,000 "	" $8.70
April 1,	" " " " " John Sidney	700 "	" $8.75
April 15,	" " " " " Bankers' Union Inc.	12,400 "	" $8.80
		20,000	

During the same period, the following transfer notices have been received by the company:

March 12,	Sold by John Doe to Henry Doe	500 shares, cert's Nos.	303-7*		
24,	" " Peter Henry to A. Arnold	2,000 " " "	322-41		
April 20,	" " Bankers' Union to Miners' Bank	6,000 " " "	404-63		

Required:

The recording of the above facts on the corporate stock journal of the Goldengate Mining Company.

*New certificate numbers are to be provided for the issue of treasury stock and for exchanges.

PROBLEM II

To illustrate the principles of accounting involved in recording the transactions incident to the organization of a corporation, and the mechanism of corporate accounting records. (See Chapter IV.)

At a meeting held on January 25, 1916, the incorporators of the Carlton Manufacturing Company approve the articles of incorporation of the company drawn by counsel in accordance with the corporation laws of New Jersey. The stock subscription book is signed by them as follows:

Name	Shares	Amount Paid	
H. R. Pitt	20	25%	(Paid by check)
R. V. Carson	20	25%	" " "
H. St. John	20	25%	" " "
S. Verner	20	25%	" " "
Y. Lucas	20	25%	" " "

The articles of incorporation are filed February 1, 1916, with the Secretary of State and the county clerk, the incorporators paying fees of $210 for filing and incorporating. The authorized capital stock is $1,000,000, divided into shares of $100 par value.

Between January 25 and February 1, the incorporators obtain from four prominent financiers, subscriptions to 4,000 shares of stock, each subscriber agreeing to take 1,000 shares; the condition of the subscription is that 25% shall be paid in cash upon subscribing, and 25% on the first of every month thereafter, until the stock is fully paid. At a meeting of the stockholders, held February 10, the incorporators are elected directors. The directors hold their first meeting on February 11, and accept John Doe's proposition to sell to the company a suitable factory, ready for operation, together with the land on which it stands, and the machinery and equipment which it contains, for the sum of $690,000.

The conditions of the settlement to be made by the company are as follows:

John Doe, vendor, is to receive:

1. Capital stock, $490,000.
2. Purchase money mortgage, covering land, building and equipment, present or to be acquired, bearing interest at 6%, payable semiannually, the mortgage dated February 1, 1916, due February 1, 1921. Amount of mortgage, $150,000.
3. Two promissory notes of $25,000 each, bearing interest at 6%, and due, one, five months after February 1, 1916, the other, seven months after February 1, 1916.

During the period from February 1 to May 10, 1916, the Carlton Manufacturing Company has collected all

moneys receivable on account of subscriptions to stock, and on May 2, 1916, has issued the stock subscribed. From the stock still unissued 975 shares are issued the same day (May 2), at par, to H. B. Turner, contractor, in settlement of extensions and alterations made by him to the factory building.

The certificates of stock issued are as follows:

Date	Name	No. of Cert.	No. of Shares
Feb. 11, 1916	John Doe................	1–49	100 (in each cert.)
May 2, 1916	H. R. Pitt................	90	20
	R. V. Carson............	91	20
	H. St. John..............	92	20
	S. Verner................	94	20
	Y. Lucas................	93	20
	J. Smith..................	50–59	100 (in each cert.)
	Wm. Jones...............	60–69	100 "
	James Brown............	70–79	100 "
	Robert Decker...........	80–89	100 "
	H. B. Turner............	95–103	100 "
	" " "	104–106	20 "
	" " "	107–109	5 "

On May 10, John Archbold, counsel for the company, presents a bill for legal services and expenses in connection with the organization of the company for $2,500, and agrees to accept in payment therefor, 25 shares of stock at par. Accordingly, the following stock certificates are issued to him:

No. 110	20 shares
" 111	5 "

Required:

The recording of the above stock transactions in a properly ruled stock book. A "Capital Stock Issued Controlling Account" must be kept.

PROBLEM III

Based on single-entry principles. (See Chapter V.)

John Armstrong is engaged in wholesale trading.

His ledger, opened by a local bookkeeper, is based on the single-entry system, and, at December 31, 1916, that is to say, at the end of the first year's business, discloses the following facts:

Due from Customers (as per schedule)	$ 995.00
Due to Creditors (" " ")	1,800.00
John Armstrong, Capital Account (unchanged throughout year)	8,000.00

A single-entry journal and a check book are the only other records kept by John Armstrong.

The physical inventory taken on December 31, totals $3,450.

You are asked to ascertain the present worth of the business, and the extent of the increase of the proprietor's worth during the year.

After a preliminary examination of the records, and a consultation with the proprietor, you find the following as at December 31, 1916:

Cash in Bank		$3,320.00
Cash in Store		150.00
Notes Receivable (all transactions in December, 1916)		50.00
Notes Payable (all transactions in December, 1916)		2,000.00
First Mortgage on Real Estate and Building*		2,500.00
Cost of Land and Building	Acquired prior to January 1, 1916, with a view of engaging in business.	6,000.00
Cost of Furniture and Fixtures		915.00
Cost of Delivery Equipment		750.00

*Given before January 1, 1916.

From the foregoing facts, prepare:

A statement of assets and liabilities at January 1, 1916,

and at December 31, 1916, showing the net increase of capital for the year, as determined by the asset and liability method.

PROBLEM IV

Based on the application of the principles of double entry to the construction of ledger accounts and introducing the legal theory of consignments inward. (See Chapter XVII.)

The general balance sheet of Armstrong & Campbell at March 31, 1916, shows:

Assets		*Liabilities*	
Land and Building......	$6,000.00	1st Mortgage 6%, 1918..	$2,500.00
Furniture and Fixtures..	915.00	Notes Payable..........	*3,150.00
Transportation Equipment.................	1,550.00	Accounts Payable.......	17,894.80
Good-Will.............	1,000.00	Reserve for Good-Will..	1,000.00
Merchandise Inventories	22,890.00	John Armstrong, Capital	13,415.13
Cash..................	10,955.75	A. Campbell, Capital....	11,599.62
Notes Receivable........	*1,750.00		
Accounts Receivable....	4,200.00		
Freight and Expenses on Consignment No. 1....	120.60		
Freight and Expenses on Consignment No. 2....	130.00		
Freight and Expenses on Consignment No. 3....	48.20		
	$49,559.55		$49,559.55

*All to run 90 days from date of issue; received or issued in March, 1916.

In accordance with the requirements of their articles of copartnership, Armstrong & Campbell took a physical inventory on June 30, 1916. It disclosed, figured at cost, ex-

clusive of freight: merchandise, $59,843.04; consignments No. 1, $1,500; No. 2, $1,900; No. 3, $51.80.

In connection with consignments, the firm has decided to settle for sales to date by checks drawn June 30, 1916, on the banking house of Brown, Smith & Co., London, with whom they deposited $12,000 on June 1, 1916. Under the terms of the consignments, 10% is to be allowed to the consignees, and the consignors are to be charged with all expenses for freight and cartage, for allowances on defective goods, and for trade discounts. An account sales is to be forwarded with each remittance. All the sales made by Armstrong & Campbell for the account of the consignors have been paid for by customers at June 30, 1916.

The inventory pricing has not taken into consideration freight on goods received and not sold; so far as you can ascertain, said freight amounts to $377.80.

The bookkeeper submits the following trial balance and explains that he has closed the consignment accounts, as this was necessary to ascertain the amount of remittances to be made. With this exception, the trial balance is before closing:

Trial Balance, June 30, 1916

Brown, Smith & Co., London	$1,198.01	Notes Payable	$30,000.00
Land and Building	6,000.00	Accounts Payable	49,701.74
Furniture and Fixtures	975.00	1st Mortgage Payable	2,500.00
Transportation Equipment	3,150.00	Consignment No. 1	1,500.00
Cash	24,934.13	" " 2	1,900.00
Notes Receivable	12,000.00	" " 3	51.80
Good-Will	1,000.00	Interest, Banks	75.60
Freight and Cartage Outward	310.50	Reserve for Good-Will	1,000.00
Heat and Light	30.80	Commissions — Consigned Goods	1,264.82
Stable Expenses	350.00	J. Armstrong, Capital	13,415.13
		A. Campbell, Capital	11,599.62

TRIAL BALANCE—*Continued*

Salaries—Clerks	500.00		
" Partners	300.00		
" Salesmen	900.00		
Sundry Expense—Store	210.50		
Commissions — Salesmen	1,850.70		
Consignment No. 1....	1,500.00		
" " 2....	1,900.00		
" " 3....	51.80		
Accounts Receivable....	19,388.84		
Merchandise	35,508.43		
J. Armstrong — Drawings	450.00		
A. Campbell—Drawings	500.00		
Total............	$113,008.71	Total............	$113,008.71

The transactions of the period under review are as follows:

Merchandise

Purchases, $128,020.26; sales, $118,066.85; freight in, $2,540.71; allowances on defective sales, $1,555.11; allowances on defective purchases, $1,521.29; trade discounts from creditors, $4,645.93; trade discounts, customers, $1,781.70; sales returned, $5,930.90; purchases returned, $2,725.50; freight refunded on purchases returned, $250.68.

Consignment Debits

Sales value of goods consigned March, 1916: No. 1, $10,100; No. 2, $5,000; No. 3, $1,000. Freight, insurance, etc., March, 1916: No. 1, $120.60; No. 2, $130.00; No. 3, $48.20. Freight on sales: No. 1, $138.60; No. 2, $60.10; No. 3, $40.50. Allowances to customers for defective goods: No. 1, $14.16; No. 2, $8.20; No. 3, $21.03.

Consignment Credits

Sales: No. 1, $8,600; No. 2, $3,100; No. 3, $948.20. Freight and allowances charged to consignors: No. 1, $273.36; No. 2, $198.30; No. 3, $109.73.

From the foregoing prepare ledger accounts: Cash, Accounts Receivable, Accounts Payable, and all the ledger accounts affected by the consignment transaction.

PROBLEM V

To illustrate the working of the theory of agents' accounts as indicated by the requirements of the law of agency. Adapted from the New York C. P. A. Examination of January, 1913. (See Chapter XVII.)*

Karl Smith is a real estate broker and agent who, among other things, manages properties in consideration of commissions, ranging from 3% to 5% on rent collections. For the last two years his books have been kept in haphazard fashion and in violation of the law of agency. They are incomplete as to footings and postings; no trial balance of the general ledger has been obtained and no reconciliation of bank balances has been established during the above mentioned period. The tenants rent book is a species of "tickler" in which the current rent charges are entered in pencil and inked in when paid; the names of the tenants of properties not leased are also entered in pencil and erased when tenants move, the new names being entered in the places thus left vacant.

*The requirements of this problem have been changed to suit present needs; one of the original requirements being essentially an auditing test.

Having accidentally discovered irregularities in the tenants book, Karl Smith has discharged his bookkeeper-cashier and engaged an accountant to conduct an examination of his books, records, and accounts, discover the extent of the shortage, which he fears is considerable, and instal a new system of accounts.

After spending considerable time in an attempt to place the books on an accounting basis, the accountant finally obtains the following trial balance of the ledger, as of September 30, 1916, instals a new system which will permit his client to fulfill his accounting duty as an agent, and renders a preliminary report accompanied by a statement, showing clearly the financial status and the relations of Karl Smith to his principals:

TRIAL BALANCE

Cash		$350.20	Karl Smith, Capital		$4,360.40
Petty Cash		100.00	Commissions		22,510.00
The Augusta Terrace	(a)	215.00	Phoenix Insurance Co.		470.00
" Victoria Court	(a)	805.00	London Insurance Co.		450.10
" St. Quentin Court	(a)	650.00	The Frederic Apartment	(f)	2,385.30
" Audubon Court	(a)	270.00	" Venetian Court	(f)	2,500.00
" Evening Despatch	(b)	75.00	" Franklin Castle	(f)	3,231.00
" Morning News	(b)	35.00	St. Martin Hall	(f)	2,850.70
" Union Wall Paper Co.	(b)	111.20	Tenants		1,550.00
" Janitors' Supplies Co.	(b)	45.25			
Insurance Account	(c)	920.10			
Karl Smith, Drawings	(d)	16,930.00			
Cash Shortage	(e)	380.00			
Salaries		12,140.00			
Office Expense		3,130.00			
Furniture and Equipment		4,150.75			
		$40,307.50			$40,307.50

Notation by the accountant:

(a) Remittances on account of collection of October rents, paid in advance upon signing lease, not as yet credited to the principals. Settlements to be made on the 29th of every month.

(b) Balances representing payments from March to June, 1916, for advertising, decorating and supplies, for the account of managed properties. Paid bills cannot be found; no details available; itemized receipted bills asked for by letter; no answer at September 30, 1916.

(c) Premiums on fire insurance placed by agent for account of sundry clients not principals. Premiums will be paid to agent if risk is accepted and he will deduct commissions of from 5% to 15% from settlement with companies.

(d) Probably contains charges which might properly be capitalized under caption "Furniture and Fixtures" if positive information were available.

(e) Entries made in cash book by accountant for rent collections appearing in monthly statements to principals, but not appearing in cash book nor in duplicate of bank deposits obtained from banks.

(f) According to the terms of his employment the agent must remit on the fifth day in every month.

Prepare the trial balance of the general ledger of Karl Smith as corrected by the accountant. Divide the said statement into two distinct parts, one showing what belongs to the agent, the other showing what belongs to the principals.

PROBLEM VI

To illustrate one of the methods of passing from the copartnership to corporation, and the recording of the transactions incident thereto. (See Chapter XXII.)

The Smithers-Jones Company is incorporated under the laws of the State of New York to acquire and conduct the business of the firm of H. B. Smithers and T. Jones. The authorized capital stock of the company is $800,000, divided into $450,000 of preferred stock and $350,000 of common stock, of the par value of $100 per share for both stocks. The preferred stock is entitled to receive a 7% dividend before any dividends are paid to common stock; but after the latter has received an equal dividend, both classes of stock shall participate equally in the balance of surplus declared as dividends to be distributed. The preferred stock is preferred as to assets.

The following assets and liabilities of Smithers and Jones, acquired and assumed by the Smithers-Jones Company, appear on the books of the vendor at January 31, 1917:

Assets		*Liabilities*	
Land	$50,000.00	Mortgage Payable	$32,500.00
Building	150,000.00	Accounts Payable	110,023.00
Transportation Equipment	10,000.00	Notes Payable	16,500.00
Furniture and Fixtures	5,000.00	Reserve for Depreciation of Physical Property	51,300.00
Machinery and Tools	72,000.00	Capital of Partners	350,000.00
Goods in Process	68,195.00		
Finished Goods	51,830.00		
Materials and Supplies	22,650.00		
Accounts Receivable	114,648.00		
Notes Receivable	16,000.00		
	$560,323.00		$560,323.00

The price which the corporation has agreed to pay for the properties taken over is $500,000, which is to be paid in stock of the corporation to the three partners of the vendor firm in the proportion in which they have divided their profits in the past, i.e., H. B. Smithers, 2/5; T. Jones, 2/5; X. Vreeland, 1/5.

The stock is issued on February 2, 1917, and at their meeting of February 15, 1917, the directors of the company decide to carry the value of the land at $70,000; the building at $160,000; the transportation equipment at $13,000; the furniture and fixtures at $7,000; the machinery and tools at $80,000; these increases are based on the present replacement value of the properties affected. The reserve for depreciation is to be carried at a figure decreased in the amount of the increases of the book value of the physical assets other than land.

The balance of the purchase price is to be set up as good-will, to cover the firm's name and the good-will it conveys, in addition to trade-marks and patents written off by the copartnership in the last five years to the extent of $17,000, their original value.

Required:

Explicit journal entries recording the above facts on the books of the Smithers-Jones Company.

PROBLEM VII

To illustrate a second method of passing from copartnership to corporation, and the recording of the transactions incident thereto on the books of the vendee and the vendor. (See Chapter XXII.)

The firm of Bowman & Turner, including J. Vermont as a silent partner, decides to sell out to the International Novelty Company, which the partners have incorporated with an authorized capital stock of $200,000, divided into 700 shares of 6% cumulative non-voting preferred stock, and 1,300 shares of common voting stock, all of the par value of $100 per share. The preferred stock is preferred as to assets.

The contract of sale refers only to fixed assets and working and trading assets, the copartnership having agreed to liquidate its current liabilities. The balance sheet of the vendor firm shows at September 30, 1916:

Cash	$11,254.00	Accounts Payable	$45,635.40
Accounts Receivable	39,616.00	Notes Payable	11,000.00
Notes Receivable	7,000.00	Wages Payable	1,234.60
Finished Goods	5,320.00	T. S. Bowman	75,000.00
Goods in Process	20,040.00	S. D. Turner	45,000.00
Materials and Supplies	25,600.00	J. Vermont	40,000.00
Furniture and Fixtures	3,800.00		
Shop Tools	6,540.00		
Machinery and Machine Tools	38,700.00		
Land, Factory, and Equipment	60,000.00		
	$217,870.00		$217,870.00

The price agreed upon as between the copartnership and the corporation is $194,000, which is subject to the following agreement:

J. Vermont, special partner, whose investment has, in the past, netted him 6% per annum, will receive 6% non-voting preferred stock; T. S. Bowman and S. D. Turner are to have equality in the management of the corporation. The excess price to be paid by the corporation over the net worth of the assets transferred by the copartnership is to

be settled in bonds of the denomination of $500 each, due 1932, bearing interest at 6%, interest and principal to be secured by a mortgage on all the property and equipment. The general partners only are to share in the salable value of the good-will.

Required:

1. The expression, in journal entry form, of such of the above facts as concern the corporation.
2. The journal entries necessary to close the books of the copartnership.

PROBLEM VIII

To illustrate the effect of careless accounting upon the books of corporations which have been created for the purchase of copartnerships. (See Chapter XXII.)

A and B were copartners in a newspaper publishing business, sharing profits and losses equally. A trial balance of their general ledger at December 31, 1916, was as follows:

Operating Expenses (less earnings)	$1,343.89	
A's Investment Account (representing losses over and above capital contributed)	1,519.79	
B's Investment Account (representing losses over and above capital contributed)	1,519.78	
A's Loan Account		$6,839.31
B's Loan Account		110.36
General Expenses	281.06	
Accounts Receivable	2,012.14	
Cash	273.01	
	$6,949.67	$6,949.67

A and B agreed to sell to the Daily Star Publishing Company, a New York corporation, as of January 1, 1917, the newspaper published by them, together with all the assets of their publishing business in consideration of 45 shares, par value $100 each, of the company's capital stock (total issue, $5,000) and $500 in cash, the company to assume all the outstanding liabilities of the business carried on by A and B.

No new books were opened for the corporation, the books of the partnership having been retained as suitable for the corporate body. No journal entries relating to the assets acquired, liabilities assumed, and capital stock issued, were made. Prior to the establishment of the above trial balance, the company received a check for $500 from one of the incorporators, in payment of subscribers' shares, which was credited in error to A's loan account. The payment of $500 in cash to A and B as part consideration of the business purchased has not been made. Amounts of $6,839.31 and $110.36 due to A and B, respectively, are to be considered as liabilities of the corporation. The debit balances in A's and B's investment accounts and the operating and general expenses shown above, were closed out to profit and loss on the books of the company in subsequent periods.

Required:

1. The journal entries necessary to correct the books of the corporation in respect of its capital stock and other accounts; express the facts in view of a possible lawsuit involving your taking the stand as a witness.
2. The trial balance of the books as adjusted by you.
3. All the ledger accounts affected by your adjustments.

PROBLEM IX

To illustrate the recording of certain phases of corporation finance, and the difficulty of giving accounting expression to careless resolutions of boards of directors. (See Chapter XXII.)

Two-thirds of the stockholders of the Precision Machine Company, incorporated under the laws of the State of New York, have consented to an issue of bonds by the company. Accordingly, on January 5, 1916, they pass resolutions authorizing the issue, and define the amount, denomination, interest rate, and terms of the bonds, as follows:

200 bonds of $1,000 each, dated January 1, 1916, due December 31, 1922, bearing interest at 4½%, payable annually on December 31; amount of bonds, $200,000.

200 bonds of $500 each, dated January 1, 1916, due December 31, 1924, bearing interest at 4¾%, payable annually on December 31; amount of bonds, $100,000.

200 bonds of $500 each, dated January 1, 1916, due December 31, 1928, bearing interest at 5%, payable annually on December 31; amount of bonds, $100,000.

The bonds are secured by a blanket mortgage on the land, factory buildings, factory equipment, and materials and supplies, the conditions of the indenture being such that, as soon as one of the issues of bonds is retired, the share of the mortgage securing it will apply to the unretired issues of January 1, 1916. The indenture contains a clause relating to the creation of a sinking fund out of annual profits for the redemption of bonds at maturity.

In order that the sinking fund provision of the indenture may be properly carried out, the directors of the company, at a meeting held January 8, 1916, resolve that there shall be charged annually to profits as ascertained at December 31, an amount representing 1/7, 1/9, and 1/13 of the par value of the bonds issued, less the amount of interest earned by the sinking fund during the prior period; that an amount of cash equal to the amount of the reserve shall be set aside annually, and deposited with a trust company at interest; that the interest earned by the fund shall be deposited with the fund and credited to revenue. The board denies itself the right to use the sinking fund for any purposes other than that for which it is created.

The board, at the same meeting, resolves that the discount and premiums which may be lost or gained on the sales of bonds shall be amortized in equal yearly amounts, throughout the life of the bonds.

The bonds were sold during January, 1916, as follows:

Issue	of	4½%	bonds	due	1922,	sold	at	99
"	"	4¾%	"	"	1924,	"	"	par
"	"	5%	"	"	1928,	"	"	103

The trust company with which the sinking fund is to be deposited, has agreed to pay thereon 4% interest annually.

Required:

1. The cash book entries for the two years ended December 31, 1916, and December 31, 1917, giving expression to the facts recited by the problem.
2. The journal entries, for the same period, affecting the sinking fund provision of the indenture, and the amortization.

PROBLEM X

From New York C. P. A. Examination of January, 1914. (See Chapter XXIII.)*

An investment bond house purchases 10 New Jersey Traction Company first mortgage 5% bonds at 83½; 10 New Orleans Gas Light and Power Company first mortgage 5% bonds at 104 (accrued interest is not to be considered).

Prepare the necessary entries to record properly these transactions on the books of the bond house.

PROBLEM XI

From New York C. P. A. Examination of January, 1914. (See Chapter XXIV.)

A trust company assumes the responsibility of a sinking fund on which it guarantees to pay 3% interest. The trustee receives $103,000 deposited to the credit of the sinking fund, and on January 1, 1911, invests on a 3% basis in 100 Clair County Light, Heat & Power Company 5% $1,000 first mortgage gold bonds, due July 1, 1912, interest payable semiannually.

Prepare the accounts of the trust company, showing the invested amount and the amortization of the premiums at the several interest periods.

*Auditing requirements left out.

PROBLEM XII

Showing the effect which the ignorance of the theory of accounts has upon accounting results. Adapted from practical problem in New York C. P. A. Examination of June, 1912. (See Chapter XXV.)

The books of Vincent Armstrong at June 30, 1916, show the following:

Debits		*Credits*	
Cash	$9,800.00	Brooklyn Terminal Co., (a)	$3,000.00
Real Estate	3,000.00	Contracts 1-2-3 (b)	11,850.00
Office Furniture	1,095.00	L. V. Tramways Co. (c)	1,640.00
Investments, Stocks	7,650.00	Consulting Earnings	1,980.00
" Bonds	2,300.00	Report Earnings (d)	15,000.00
" Margin Account	12,000.00	A.B.C. Stock Brokers	10,310.00
Receivable Accounts	16,000.00	Stocks and Bonds (e)	2,600.00
Expense Account (f)	9,700.00	Capital	16,250.30
Interest (g)	1,085.30		
	$62,630.30		$62,630.30

The books were kept from June 30, 1915, to June 30, 1916, by three different bookkeepers, and an audit discloses:

(a) The account "Brooklyn Terminal Company" contains receipts of consulting fees during the first six months of 1916. This is a monthly contract involving no expense whatever to V. Armstrong.

(b) "Contracts 1-2-3" are contracts for reports on the engineering possibilities of certain properties. The reports have been rendered and the expenses incident thereto have been credited to expense and debited to the amount received under the contracts.

(c) "L. V. Tramways Company" represents $2,000 received on May 1, 1916 (less expenses) on account of a con-

tract according to the terms of which Armstrong is to act as consulting engineer for 10 months from May 1 and to receive altogether $5,000. Nothing has been received in June and there are to be no further expenses to Armstrong, the amount incurred in May representing the fee paid to, and the expenses of, an engineer who took Armstrong's place while the latter was incapacitated by illness.

(d) "Report Earnings" contains fees received under contracts for reports on properties, the contracts being exactly similar to Contracts 1-2-3. The account represents:

1. Received on account of contracts on which nothing has been done up to June 30, 1916, $8,500.
2. Balance earned.

(e) "Stocks and Bonds" represents the credit balance of the general investment account; all the securities at one time included in this account have been sold.

(f) The "Expense Account" is composed of: salary—Armstrong, $6,000; other salaries, $1,700; rent, $900; advertising, $700; telegrams, $90; office expenses, $150; other expenses, $160.

(g) Interest represents: debits charged by A. B. C. brokers on margin account, $1,300; paid on loans since liquidated, $185.30; credits: dividends on stocks still held, credited by the brokers, $400.

(h) From June 30, 1915, to June 30, 1916, there was received as dividends on stocks, $1,750; of this amount $1,000 was placed to the credit of stocks still held at June 30, 1916; the balance went to the credit of general investment account "Stocks and Bonds."

Required:

Journal entries necessary to adjust the books of Vincent Armstrong and make them conform to accounting principles.

PROBLEM XIII

To illustrate the necessity of analytical accounting, and the accounting meaning of terms "Book Value," "Replacement Value," "Depreciated Book Value," "Providing for Reserves by Reappraisement." (See Chapter XXXII.)

An analysis of the "Property, Plant, and Equipment" of a corporation which began business January 1, 1914, reveals the following at December 31, 1916:

Total book value of the account	$1,011,340.00
Analysis:	
Land—Cost	$50,000.00
Buildings—Book Value	575,000.00
4 factory buildings, built of stone and brick, costing each $140,000, erected in 1914, estimated to last 35 years; not depreciated; 3 store houses valued at $5,000 each, built of wood and tin; erected in 1914, estimated to last 10 years; not depreciated.	
Factory Equipment—Cost	45,000.00
Boiler Plant, costing $16,000, installed in 1914, not depreciated.	
Power Plant, costing $18,500, installed in 1914, estimated to last 15 years; not depreciated.	
Belting, Shafting, Pulleys, costing $10,500, installed in 1914, estimated to last 10 years; not depreciated; no charges to account other than cost.	
Machinery—Book Value	320,000.00
40 machines as follows:	
20—Universal standard machines, cost, $10,000 each, purchased new in 1914, estimated to last 15 years, with residual value of $2,000 each. Not depreciated. No charges to account other than cost.	
15—Special machines, average cost, $7,500 each, constructed in 1914 for the requirements of the factory; estimated to last 10 years, with residual value of $500 each and minimum annual repairs of $100 per machine; $500 charged to income in 1915-1916 for repairs on all these machines. Not depreciated. These machines are subject to being discarded long before their estimated life, if better machines are invented for the line of work	

which they do. Experience has shown that machines of this kind become obsolete about every five years, and have a residual value of $150.

5—Second-hand machines, cost, $1,500 each, acquired in 1915, estimated to last 5 years, with a residual value of $60 each.

Machine Tools—Book Value 12/31/16	14,000.00
Original cost, 1914, $18,000; written off the account in 1915, $2,000. In 1916, $2,000, when issued to factory. In 1916, purchases amounting to $5,340 were charged to factory expense.	
Shop Tools—Book Value 12/31/16	7,340.00
Issued to factory, credited to Tools account, and charged to factory expense: 1914 .... $1,450.00; 1915 .... 1,840.20; 1916 .... 1,530.40. Purchased in 1916, and charged to factory expense, $2,130.20.	
Sundry items of equipment, amounting to $1,390, charged to factory expense when acquired in 1915.	
	$1,011,340.00

An independent appraisal has been made at the same time as the investigation. The appraisal, as recapitulated by the appraisers, shows the following results:

	Replacement Value 12/31/16	Depreciated Value 12/31/16
Buildings—Stone, Brick and Steel	$568,000.00	$560,000.00
Buildings—Frame and Tin	17,000.00	12,000.00
Boiler Plant	17,500.00	14,500.00
Power Plant	19,000.00	17,000.00
Belting, Shafting and Pulleys	12,000.00	9,000.00
Machines—Universal Standard	203,000.00	200,000.00
Machines—Special	114,000.00	93,000.00
Machines—Other	8,000.00	5,100.00
Machine Tools	23,000.00	20,800.00
Shop Tools	9,450.00	7,000.00
Other Equipment	1,500.00	950.00
	$992,450.00	$939,350.00

The appraisal company recommends that the book value of property appraised be increased to the replacement value.

Inasmuch as some of the work in erecting the buildings has been done by the employees of the company; and as, further, the basing, erecting, and fitting of the machinery, machine tools, and equipment has been done by factory hands with material taken from stores (which facts, however, are not disclosed by the analysis made by the company), the directors realize that their property and plant is probably undervalued. Accordingly, they accept the suggestion of the appraisal company, and decide that the account "Property, Plant, and Equipment" is to be divided into its component parts at December 31, 1916, and stated at the replacement value arrived at by the appraisers.

Reserves for depreciation are to be created on the basis of the depreciated values, ½ as of 1915, and ½ as of 1916.

Required:

1. Journal entries setting up the component parts of the property account on the basis of the company's figures adjusted so as to reflect the true cost of the individual units.
2. Journal entries adjusting the books on the basis of the replacement value, and providing for reserves for depreciation.

PROBLEM XIV

From the New York C. P. A. Examination of June, 1898. (See Chapter XXXIII.)

The balance sheet of a joint-stock company, January 1, 1897, shows the following state of affairs:

Capital Stock	$200,000.00	Real Estate	$50,000.00
Creditors — Open Accounts	16,000.00	Plant and Machinery	85,000.00
Bills Payable	30,000.00	Horses and Wagons	15,000.00
Profit and Loss Account	30,500.00	Patents and Good-Will	20,500.00
		Inventory	49,000.00
		Accounts Receivable	35,000.00
		Cash in Bank	22,000.00
	$276,500.00		$276,500.00

A year later, January 1, 1898, after an audit of the books and accounts, the balance sheet stands as follows:

Capital Stock		$200,000.00	Real Estate		$52,000.00
Creditors — Open Accounts		17,000.00	Plant and Machinery:		
Mortgage		25,000.00	Balance Jan. 1, 1897	$85,000.00	
Profit and Loss Account:			Less depreciation	8,500.00	76,500.00
Balance last year	$30,500.00		Horses and Wagons:		
Profit this year	23,400.00	53,900.00	Balance Jan. 1, 1897	$15,000.00	
			Less depreciation	2,250.00	12,750.00
			Patents and Good-Will.		20,500.00
			Inventory		65,000.00
			Accounts Receivable		33,000.00
			Agency Investments		15,000.00
			Cash in Bank		21,150.00
		$295,900.00			$295,900.00

From the foregoing it will be seen that for the year a net profit of $23,400 has been earned, while the accounts receivable are smaller, and the cash balance on hand is less than at the beginning of the year, though no dividend has in the meantime been paid. Prepare account showing what has become of the profits earned.

PROBLEM XV

From the New York C. P. A. Examination of June, 1912. (See Chapter XXXV.)

THE TURNWELL TRADING COMPANY

	Trial Balance January 1, 1910	Cash Receipts from January 1, to June 30, 1910	Credited to Profit and Loss June 30, 1910
Land and Buildings	$30,000.00		
Horse, Wagons, and Harness	5,000.00		
Investment, Bonds	10,000.00		
Inventory, Merchandise	11,000.00		
Stable Supplies	150.00		
Cash	17,500.00		
Accounts Receivable	14,800.00	$36,000.00	
Interest on Investment		400.00	490.00
Increase of Inventory, Merchandise			500.00
Capital Stock		5,000.00	
Interest on Bank Balances		80.00	80.00
Sales			38,500.00
	$88,450.00	$41,480.00	$39,570.00

	Trial Balance January 1, 1910	Cash Disbursements from January 1, to June 30, 1910	Charged to Profit and Loss June 30, 1910
Mortgage Payable	$12,000.00	$3,500.00	
Accounts Payable	9,000.00	22,500.00	
Interest on Mortgage		150.00	$210.00
Salaries of Salesmen		1,500.00	1,575.00
Surplus	17,450.00		
Capital Stock	50,000.00		
Purchases			20,000.00
....		425.00	425.00
....		200.00	235.00
....		50.00	50.00
Administration Expenses		6,500.00	6,500.00
Horse, Wagons, and Harness		300.00	
	$88,450.00	$35,125.00	$28,995.00

Prepare a statement showing amount of leager assets as of January 1, 1910; add to this statement the increase of capital stock and the income of the period; deduct from the statement the disbursements of the period, concluding with a balance sheet showing total assets as of June 30, 1910.

PROBLEM XVI

Based upon the systematization of books of account for the purpose of facilitating financial statements, and upon the closing journal entries necessary to group certain facts to be included in said statements. From the New York C. P. A. Examination of June, 1912. (See Chapters XXXV, XXXVII.)

The following balances are taken from the books of the Roberts Manufacturing Company of New York City, on December 31, 1910:

Inventory of Finished Goods (January 1)	$3,684.57
Inventory of Raw Materials (January 1)	11,392.70
Purchases of Raw Materials	62,519.85
Sales	217,387.42
Wages	109,317.88
Rent	19,500.00
Discounts Received on Purchases	375.60
Discounts Allowed on Sales	186.36
Power, Light, and Heat	8,710.64
Light and Heat for Office	168.00
Repairs	1,090.00
Packing	2,017.00
Factory Expense	3,270.00
General Expense	5,230.00
Factory Insurance	1,050.00
General Insurance	750.00
Machinery and Plant	12,350.00
Tools	2,600.00
Commissions	7,642.00
Office Salaries	9,700.00
Salesmen's Salaries	8,930.00
Interest on Loans	440.00
Loans Payable	22,000.00
Discount Lost	120.00
Notes Receivable	130,000.00
Notes Receivable, Discounted	8,000.00
Notes Payable	19,500.00
Accounts Receivable	101,026.00

Accounts Payable	30,020.00
Office Furniture	1,100.00
Furniture and Fixtures	1,950.00
Cash on Hand	1,825.00
Cash in Banks	26,467.00
Returned Sales	276.00
Capital Stock	200,000.00
Reserve for Depreciations	3,236.98
Reserve for Bad Debts	5,727.00
Freight and Cartage Inward	727.00
Stable Expenses	2,750.00
Horses, Wagons and Harnesses	8,500.00
Postage and Expressage	1,250.00
Superintendence	3,500.00
Taxes	250.00
Good-Will	10,000.00
Stationery and Printing	1,080.00
Advertising	8,630.00
Surplus (1909)	63,753.00

1. Prepare from the above a trial balance arranged in systematic order, so as to facilitate the preparation of financial or business statements.

2. Draft journal entries for closing the books.

3. Certify your results by a balance sheet. Support the surplus shown by the balance sheet by a statement of income and profit and loss.

The following items are to be taken into consideration:

Inventories:	
Raw Materials	$16,250.00
Finished Goods	9,386.00
Tools	2,000.00
Office Furniture	1,000.00
Furniture and Fixtures	1,500.00
Stationery and Printing	300.00

Allow for depreciations: on machinery, 5%; on horses, wagons and harnesses, 10%.

Reserve for bad debts: 3% on accounts receivable only.

The item for rent, $19,500, is to be apportioned as follows: 53% for factory, 22% for salesrooms, and 25% for office.

The item of superintendence, $3,500, is to be divided, 3/5 to factory and 2/5 to general expense.

PROBLEM XVII

Based on the application of double-entry principles to the establishment of financial statements — introducing the technique of journalizing, and the theories which underlie the various forms assumed by the said statements. (See Part V.)

Armstrong & Campbell accept the offer made to them by H. Dover on July 1, by which he is to invest $25,000 in the business, becoming a special partner, and sharing to the extent of one-fifth in their profits. On July 2 Dover agrees to exert all his business ability towards the welfare of the concern. He pays to the business an additional $5,000 in cash; this is to be treated as additional capital invested by J. Armstrong and A. Campbell equally and is in the light of a payment by Dover to the old partners personally for their services in acquiring the good-will which the business possesses. The value of good-will has been agreed to be $6,000.

The new articles of copartnership provide that the partners shall share in the profits to the extent of, Armstrong, two-fifths; Campbell, two-fifths; Dover, one-fifth. No interest is to be credited on capital invested.

A new bookkeeper has been engaged by the firm, and at July 31, 1916, he presents the following trial balance:

TRIAL BALANCE, JULY 31, 1916

Debits		*Credits*	
Cash	$45,961.90	Returned Purchases	$1,960.30
Land and Building	6,000.00	Sales	72,105.00
Furniture and Fixtures	975.00	Interest on Bank Balance	22.10
Horse, Wagon and Harness	3,150.00	Commission — Consignment	345.18
Good-Will	6,000.00	Trade Discount—Creditors	1,085.50
Merchandise Inventory	59,843.04	Allowances on Purchases	241.26
Freight Inward on Purchases Sold	662.80	1st Mortgage, Payable 1918	2,500.00
Freight Inward on Purchases Unsold	95.90	Notes Payable	11,400.00
Trade Discount — Customers	1,614.60	Accounts Payable	10,640.21
Allowances on Defective Sales	307.20	J. Armstrong, Capital	29,265.30
Freight and Cartage, Outward	101.50	A. Campbell, "	27,399.78
Heat and Light	6.40	H. Dover, "	25,000.00
Stable Expenses	112.15		
Salaries—Clerks	160.00		
" —Partners	100.00		
" —Salesmen	300.00		
Sundry Expense	65.00		
Accounts Receivable	20,238.67		
Notes Receivable	8,200.00		
Foreign Exchange	12.30		
Legal Expense	60.00		
Purchases—Merchandise	25,350.30		
Sales Returned	2,647.87		
	$181,964.63		$181,964.63

The following facts are submitted:

Inventory, July 31, 1916: merchandise, $28,423.34.

Notes receivable; notes outstanding July 1, 1916, collected, $9,800; new notes received, $6,000.

Notes payable: notes outstanding July 1, 1916, paid, $26,600; new notes given, $8,000.

Consignments—all sold, all sales collected; allowances: No. 1, $4.50; No. 2, $6.20; freight on sales: No. 1, $30.10; No. 2, $45.02; No. 3, $2.25. Balance due to consignors, remitted.

Stable expense—50% applicable to freight and cartage inward; the balance applies to goods sold.

From the foregoing, and from the facts in Problem IV, prepare:

1. The journal entries incident to the admission of the new partner, and to the closing of the books.
2. Statement of income and profit and loss.
3. General balance sheet.
4. Trading and profit and loss account subdivided into sections corresponding to the main groups of facts found in the "Statement of Income and Profit and Loss."
5. Account sales to consignor No. 1 from March to July, 1916, both inclusive.

PROBLEM XVIII

From the New York C. P. A. Examination of February, 1910. (See Part V.)

The directors of a manufacturing company, before the closing and auditing of the books for the half year ending December 31, declared out of the net earnings of the company, a dividend for the half year of 4% on the preferred stock of $100,000 and 3% on the common stock of $100,000.

There has been brought forward from the last half year an undivided balance of profit of $4,000 and after the audit of the books the trial balance is found to be as follows:

TRIAL BALANCE, DECEMBER 31

Real Estate and Building	$32,500.00	Preferred Stock	$100,000.00
Plant and Machinery	40,000.00	Common Stock	100,000.00
Patents and Good-Will	80,000.00	Sales	219,175.00
Inventory, July 1	29,000.00	Notes Payable	26,000.00
Purchases	82,500.00	Accounts Payable	14,000.00
Labor	88,000.00		
Coal	6,000.00		
Salaries—General	11,000.00		
Salaries—Management	5,000.00		
Insurance	875.00		
Allowances	6,250.00		
Freight	1,500.00		
Discount and Interest	750.00		
Cash in Bank	8,000.00		
Investments	15,500.00		
Miscellaneous Expense	4,300.00		
Book Debts	42,000.00		
Preferred Stock in Treasury	5,000.00		
Repairs	1,000.00		
	$459,175.00		$459,175.00

Stock on hand, $26,500. From the above prepare profit and loss and income statement and balance sheet, giving effect in accounts to depreciation at the rate of 7½% a year on plant and machinery, and making an allowance of 5% on the book debts to provide for bad debts; also create a liability in the balance sheet for dividend as stated.

PROBLEM XIX

Introducing one of the methods of merging corporations. From the New York C. P. A. Examination of January, 1912. (See Part V.)

The Burnwell Gas Company is incorporated on January 1, 1910, with an authorized capital of $300,000 (2/3 preferred stock and 1/3 common),* to acquire and conduct the business of the Safety Gas Company, whose general balance sheet shows the following on December 31, 1909:

Buildings, Machinery and Equipment	$100,000.00	Notes Payable	$10,000.00
Mains, Conduits, Meters and Connections	70,000.00	Accounts Payable	52,000.00
Franchises, Rights, Privileges, etc.	50,000.00	Capital Stock	200,000.00
Materials and Supplies	15,000.00	Surplus	30,000.00
Tools and Emergency Equipment	10,000.00		
Cash	11,800.00		
Accounts Receivable	35,200.00		
	$292,000.00		$292,000.00

On January 15, 1910, all the preferred and common stock of the Burnwell Gas Company was issued to the 20 stockholders of the Safety Gas Company, in exchange for their holdings of stock of the latter company, in the proportion of one share of preferred and one share of common for each share of stock exchanged.

At a meeting of the board of directors of the Safety

* The original problem reads: "All the shares being of the par value of $100." As this is unworkable from the point of view of the issue of stock, the problem has been changed to read as above. The error is evidently due to a misprint.

Gas Company, held January 20, 1910, it was resolved to carry out the provisions of a plan of merger in accordance with which the Safety Gas Company was to transfer its assets and liabilities to the Burnwell Gas Company and surrender its charter. A certificate of merger was issued at the close of the meeting.

At a meeting held January 31, 1910, the board of directors of the Burnwell Gas Company resolved to open accounts on the general books of the company, with the individual assets and liabilities taken over and assumed, at the figures shown by the balance sheet of the Safety Gas Company at December 31, 1909, with the following exceptions: (a) franchises, etc., to be raised to $70,000; (b) surplus not to be carried.

As to the January operating transactions, they were recorded in special books, in order that they might be embodied at the proper time in the books of the Burnwell Gas Company.

Prepare:

1. Chronological journal entries reflecting on the books of the Burnwell Gas Company the different stages of the merger.
2. A journal entry closing the books of the Safety Gas Company.

PROBLEM XX

To introduce the subject of the holding company, and to illustrate the theory of consolidated balance sheets. (See Chapter XXXVIII.)

The Great Eastern Securities Company is organized under the laws of the State of New Jersey, "to purchase, hold,

sell, assign, transfer, pledge, or otherwise dispose of the shares of the capital stock of, or any bond, securities, or other evidences of indebtedness created by, any other corporation or corporations of this or any state."

The company has an outstanding capital stock of \$6,000,000, represented by 60,000 shares of common stock, which has all been subscribed and 50% paid in.

In July, 1916, the Up-State Electric Lighting Company, doing business in the State of New York and capitalized at \$1,000,000, of which \$200,000 is preferred stock, and having an outstanding issue of \$500,000 of 6% bonds due August 15, 1916, finds itself so discredited, owing to bad management and losses due to floods, that it cannot hope to provide funds to retire the issue of bonds at maturity. In the course of the life of the bonds, the Up-State Company has created an adequate reserve for its bonded indebtedness, which now equals the liability for bonds, but has not been funded.

The Up-State Company has a surplus of \$175,000, but among its assets there is an investment of \$250,000, representing cost, amortized to par, of 6% sewer bonds of the City of Rochester and Town of Gates. These bonds were defaulted as to principal in 1914, the City of Rochester having disclaimed liability thereunder.

The Great Eastern Company, being cognizant of the financial distress of the Up-State Company, offers to purchase its whole capital stock outstanding, paying \$98 for the preferred and \$95 for the common. It also offers to advance to the Up-State Company \$500,000 to retire outstanding bonds at maturity, and to purchase at \$94 the whole of a new issue of bonds amounting to \$500,000, due 1930, to be made by the Up-State Company, and to be secured by the same mortgage now covering the issue to be retired.

The Great Eastern Company further proposes to acquire, at 50% of their face value, the sewer bonds held by the Up-State Company. The purchaser has information leading to the belief that 50 or 60% of the face value of the securities will eventually be paid to the bondholders.

The negotiations go through, and all these transactions take place during the month of August. The whole capital stock of the Great Eastern Company is issued in August.

The balance sheet of the Up-State Electric Company at the time of the acquisition of that company's stock by the Great Eastern Securities Company was as follows:

Land and Buildings	$550,750.00	Capital Stock:	
Machinery, Service Lines and Mains	1,079,380.00	Preferred	$200,000.00
Tools and Supplies	124,350.00	Common	800,000.00
Cash	30,150.00	6% Bonds, 1916	500,000.00
Investments	250,000.00	Accounts Payable	49,730.00
Accounts Receivable	182,750.00	Surplus	175,000.00
Deferred Charges to Income	7,350.00	Reserve for Redemption of Bonds	500,000.00
	$2,224,730.00		$2,224,730.00

Required:

1. The journal entries expressing the above transactions on the books of the Great Eastern Securities Company.
2. The balance sheet of the Great Eastern Securities Company at August 31, 1916.
3. The balance sheet of the Up-State Electric Lighting Company at August 31, 1916.
4. The consolidated balance sheet of the two companies at August 31, 1916.

PROBLEM XXI

Illustrating the technique of the consolidated balance sheet. (See Chapter XXXVIII.)

The F. L. Company owns the stock of two operating companies; the investment stands on its books at $500,000, for which the holding company issued its own stock in the amount of $200,000 of preferred and $200,000 of common, and $100,000 of 5% gold bonds. The authorized capital stock of the holding company is $500,000, $300,000 being preferred; the authorized bond issue is $100,000; the capital stock is all issued, full-paid, and non-assessable. The balance sheet of the operating companies, at the time the holding company purchased their stock, was as follows:

Assets

	Co. X	Co. Y
Land, Buildings and Realty Fixtures*	$50,000.00	$74,000.00
Machinery and Machine Tools	45,000.00	39,000.00
Plant Movable Equipment	10,000.00	7,000.00
Shop and Hand Tools	6,000.00	3,000.00
Furniture and Personalty Fixtures	4,900.00	5,000.00
Office Equipment	1,050.00	1,740.00
Goods in Progress	15,000.00	17,300.00
Finished Goods	7,500.00	11,800.00
Raw Materials	17,000.00	21,850.00
Sundry Factory Supplies	3,500.00	6,650.00
Investments:		
Bonds, Company Y	50,000.00	
Bonds, Other Industrial Companies	10,000.00	
Accounts Receivable	34,850.00	31,580.00
Cash	3,941.00	30,500.00
Demand Notes Company	5,000.00	
Accrued Interest:		
Bonds, Company Y	1,500.00	
Bonds, Other Industrial Companies	300.00	
Advances—Company X		10,000.00
	$265,541.00	$259,420.00

*Depreciation charged to cost of goods, deducted from the asset in the amount of $9,400.

Liabilities

	Co. X	Co. Y
Capital Stock:		
Preferred	$100,000.00	
Common	100,000.00	$50,000.00
Bonds:		
Principal		150,000.00
Interest		4,500.00
Notes Payable	2,000.00	15,000.00
Advances Payable	10,000.00	
Accounts Payable	15,300.00	9,345.00
Surplus:		
Reserved:		
For Depreciation of Physical Assets (not charged to cost of goods)		11,300.00
For Redemption of Bonds		7,500.00
For Doubtful Accounts Receivable	1,035.00	637.00
Available for Dividends	37,206.00	11,138.00
	$265,541.00	$259,420.00

Required:

The consolidated balance sheet of the three companies, established in accordance with the request of the board of directors of the F. L. Company for exact information as to the properties which the latter company controls.

PROBLEM XXII

Introducing a discussion of the effect of the rulings of the Interstate Commerce Commission upon generally accepted accounting theories and methods. (See Part V.)

From the following trial balance after closing and the footnotes attached, prepare the balance sheet of the Blank Railroad Company as at December 31, 1916, in accordance with the rulings of the Interstate Commerce Commission, effective July 1, 1914.

Trial Balance

(1) Investment in Road and Equipment..	$17,900,900
(2) Miscellaneous Physical Property	684,750
(3) Expenditures on Leased Railway Property	360,000
(4) Sinking Funds:	
(a) For Redemption of Equipment Certificate..	465,900
(b) For Redemption of Mortgage Bonds	550,000
Investments:	
(5) (a) Investments in Affiliated Companies.	2,355,000
(6) (b) Other Investments..	396,500
(7) Cash	1,943,900
(8) Deposits and Loans	3,968,600
(9) Accounts Receivable	694,000
(10) Materials and Supplies	315,000
(11) Interest and Rents Receivable	360,150
Working Funds in Hands of General and Special Agents	18,410
Rentals Paid in Advance	1,150
Insurance Paid in Advance	5,680
(12) Suspense Account	284,471
Discounts on Capital Stock (net).	18,560

Capital Stock:	
(a) Preferred ..	$5,000,000
(b) Common ...	10,000,000
(14) Funded Debt......	7,348,900
(15) Accounts Payable.	798,190
Loans Payable....	500,000
Unmatured Dividends Declared..	2,300,000
(16) Accrued Liabilities	23,050
Premiums on Funded Debt.........	41,030
Premium on Capital Stock.......	29,645
(17) Land Grants......	300,000
(18) Reserves	3,313,190
Profit and Loss....	3,008,072

TRIAL BALANCE—*Continued*

Discounts on Funded Debt (net)...	39,106		
(13) Securities Issued—Unsold	2,300,000		
	$32,662,077		$32,662,077

(1) Credits for abandoned property subsequent to June, 1916, $75,000.

(2) As follows: mines, $150,000; hotels and restaurants, $75,000; timber lands, $160,000; land and buildings not used for operations, $250,000; materials leased to others, $49,750.

(3) Expenditures represent improvements.

(4) As follows: (a) cash, $155,000; securities of other companies, book value, $310,900; (b) cash, $50,000; securities issued by the company (par value), $500,000.

(5) Stocks, $1,550,000; bonds, $600,000; notes, $75,000; advances, $130,000.

(6) Stocks, $250,000; bonds, $100,000; advances, $36,000; miscellaneous, $10,500.

(7) As follows: deposits subject to check, $1,850,000; sight drafts and sight bills of exchange credited to remitters, $75,000; cash in offices, $18,900.

(8) As follows: demand loans fully secured, $60,000; demand deposits, banks, $159,000; time drafts receivable, $45,800; time deposits, banks, $800,000; deposits for dividends, $2,300,000; guarantee deposits (contracts for construction), $500,000; deposits for injuries, $49,800; unsecured loans and bills, maturity less than one year, $54,000.

(9) As follows: traffic and car service balances, $609,000; due from conductors and agents, etc., $39,800; collectible from U. S. Government (mail), $19,600; individuals and companies, $25,600.

(10) As follows: materials in stores, cost, $340,000; depreciation, $25,000.

(11) As follows: interest, $210,000; rents, $50,150; dividends declared on stocks owned, $100,000.

(12) Contains: remainder of value of property abandoned prior to June, 1916, $201,340; property abandoned subsequent to June, 1916, $75,000; freight claims paid, not investigated so far as other carriers are concerned, $3,101; estimated depreciation on equipment leased, $5,030.

(13) As follows: bonds, $1,000,000, of which $500,000 are pledged to secure loans; stocks issued and reacquired by purchase, not pledged, $300,000. Not sold, but signed and ready for sale, $1,000,000.

(14) As follows: equipment obligations, $1,203,900; mortgage bonds, $5,600,000; miscellaneous, $395,000; long term, non-negotiable notes to affiliated companies, $150,000.

(15) As follows: traffic and car service balances, $701,450; audited vouchers unpaid, $42,830; wages payable, $50,200; miscellaneous, $3,710.

(16) As follows: interest accrued, $11,300; rents accrued, $4,650; taxes accrued, $7,100.

(17) Original value of land granted in aid of construction.

(18) Unapplied balance of current charges to equalize revenue. Maintenance of road and equipment, $20,640; injuries, $49,800. Charges to operating expense for depreciation of road, $1,001,500; for equipment, $500,000; miscellaneous physical property, $55,000. For redemption of mortgage bonds, $550,000; for redemption of equipment certificate, $465,900; for addition to property, $350,000; for funded debt now retired, $260,000; miscellaneous reserves not specifically invested, $60,350.

PROBLEM XXIII

To illustrate the theory of the statement of affairs in connection with sole proprietorship and copartnership and the meaning of the deficiency account. (See Chapter XXXIX.)

On October 1, 1916, John Doe finds himself insolvent. His creditors may agree to allow him to settle his affairs under the provision of the state insolvency laws, as he wishes to do, but they withhold their decision until submission to them of a statement of affairs. John Doe's books show:

Debits		*Credits*	
Cash	$3,000.00	1st Mortgage 5%, due Dec. 31, 1916	$26,000.00
Land and Building	40,000.00	Notes Payable (no interest)	23,000.00
Furniture and Fixtures	5,000.00	Accounts Payable	71,600.00
Delivery Equipment	3,000.00	Taxes Due	130.00
Merchandise Inventory Sept. 30	32,000.00	Salaries and Wages Due	315.00
Accounts Receivable	61,130.00	Merchandise	5,140.25
Notes Receivable (no interest)	8,000.00	Interest Accrued on Mortgage	260.00
Insurance on Building, Unexpired	50.00	Capital	32,610.15
Advertising Unexpired	100.00		
Salaries	2,620.00		
Expenses	4,155.40		
	$159,055.40		$159,055.40

The personal debts of John Doe amount to $625, represented by the following:

Due to Butcher	$75.00
" " Grocer	89.40
" " K. T. Realty Co. for rent	350.00
" " Constant & Sinclair, Dry-Goods	110.60
	$625.00

His personal property is as follows:

One Horse, valued at	$250.00
One Surrey and Harness, valued at	350.00
25 shares of Golden Horn Mining Co., par, $50	1,250.00
Cash in Southern Bank	511.30
	$2,361.30

In due course of time the following appraisals are obtained:

Land and building, \$42,000; furniture and fixtures, \$3,000; delivery equipment, \$2,100; merchandise inventory, \$25,000.

The accounts receivable are found to be:

Good, \$29,600; doubtful, \$15,650; uncollectable, \$15,880. It is estimated that the doubtful accounts may realize \$4,500; the notes receivable will probably be met at maturity; advertising contracts are lost; insurance refund will approximate \$17.10.

As to personal property:

The delivery equipment will realize \$400; the market value of the Golden Horn stock is \$40 per share.

Required:

A statement of affairs and a deficiency account.

PROBLEM XXIV

From the New York C. P. A. Examination of January, 1906. (See Chapter XXXIX.)

The Parker Construction Company is unable to meet its obligations and is forced into liquidation. At the time the receiver takes charge of its affairs, the following trial balance is prepared from the company's books:

Cash	\$500.00	
Land and Buildings	10,000.00	
Mortgage on Land and Buildings		\$8,000.00
Plant and Equipment	20,000.00	
Creditors		50,400.00
Completed Contract Accounts (Losses)	18,000.00	
Capital		50,000.00

Uncompleted Contract Accounts (Outlay)......	30,000.00	
Debtors' Accounts for Completed Contracts....	6,000.00	
Securities Acquired in Settlements............	15,000.00	
Inventory of Materials........................	2,000.00	
Expenses	6,500.00	
Profit and Loss (Deficiency)..................	9,400.00	
	$117,400.00	$117,400.00

The sureties on the unfinished contracts estimate that a further outlay of $20,000 will be required to complete the work and realize the contract price of $40,000, and their offer to take over the materials on hand for $1,500, as part of said cost, is accepted by the receiver. Of the securities acquired, $5,000 is pledged to secure $11,000 due creditors, and $10,000 is pledged to secure $9,000 due creditors. The company owes for taxes on real estate, $100, and for salaries and wages of employees, $1,200, which sums do not appear on the books. The company has discounted customers' notes for $3,000, of which subsequent advices indicate that $1,000 will be dishonored, and a debtor owing $1,500 on unsecured account has failed and disappeared. It is estimated that the amount realized on land and buildings will be sufficient to satisfy the mortgage only, and that plant and equipment will realize only 60% of the book value.

Prepare a statement of affairs and deficiency account.

PROBLEM XXV

From the New York C. P. A. Examination. (See Chapter XXXIX.)

The Republican Asphalt Contracting Company is forced into liquidation; and the receiver, when taking possession, finds the books of account to show:

Liabilities

Bills Payable		$18,000.00	
Creditors' Open Accounts		75,500.00	
Mortgage on Real Estate and Improvements		17,500.00	
Mortgage on Contracting Equipment		7,000.00	
Capital Stock Subscribed	$100,000.00		
Less Not Paid Up	2,500.00	97,500.00	$215,500.00

Assets

Cash in Bank and Office	$700.00	
Bills Receivable	4,300.00	
Debtors' Accounts	8,200.00	
Bonds and Warrants	23,000.00	
Real Estate and Improvements	35,000.00	
Manufacturing Plant	24,000.00	
Contracting Equipment	14,000.00	
Uncompleted Contracts (Cost)	41,000.00	
Inventory of Materials and Supplies	3,500.00	$153,700.00

The bondsmen on the unfinished contract estimate that an expenditure of $25,000 will complete the uncompleted contract and realize the contract price of $60,000, and their offer of $2,750 for the inventory of material and supplies as part of said expenditure, is accepted by the receiver. The company owes for personal taxes and adjustment of employer's liability premiums, $175 and $100, respectively, and unpaid labor accounts amounting to $1,700, which amounts do not show on the books of account.

The bills receivable, amounting to $4,300, are pledged as collateral for $3,500 due creditors, and $20,000 of the bonds and warrants have been given as security for $33,000 due creditors. $1,000 of the bills receivable is subsequently dishonored.

The receiver finds that $1,100 of the debtors' accounts is collectable. The sale of real estate and improvements (book value of $35,000) realizes $32,500; manufacturing

plant, 40% of the book value; contracting equipment, 35% of book value.

Prepare a statement of affairs and deficiency account.

PROBLEM XXVI

From the New York C. P. A. Examination of June, 1907. (See Chapter XL.)

The Fox and Dix Company, a close corporation, became embarrassed through the failure of a friendly company to whom they had given their accommodation paper, and a trustee was appointed February 1, 1906, to take charge of their affairs for the benefit of the creditors.

The condition of the estate, when the trustee took charge, was as follows:

Liabilities

Mortgage on Real Estate, maturing February 1, 1907	$15,000.00
Interest, due February 1, 1906, six months, at 5%	375.00
Taxes Due	210.00
Book Accounts Payable	3,900.00
Bills Payable (including accommodation paper, $56,000)	57,400.00
Capital Stock	40,000.00
Surplus, per profit and loss account	3,987.00
	$120,872.00

Assets

Cash on Hand and in Bank	$650.00
Merchandise (stock of goods)	25,310.00
Book Debts (including accommodation account, $56,000)	60,800.00
Bills Receivable	4,112.00
Real Estate	30,000.00
	$120,872.00

In order to complete contracts and so realize to the best advantage on the goods in stock, the trustee purchased merchandise to the amount of $50,000, and during the year collected $100,002 cash from sales.

The accommodation account was settled for 60%. The other book debts realized $4,100, and the bills receivable, $3,600. Balance, lost.

The accommodation paper was settled by paying $40,000 cash and renewing $16,000, entailing legal fees, interest, and petty expenses of $2,200.

The other bills payable, the accounts payable, taxes and interest on mortgage for eighteen months, were paid in course of settlement, and the principal of the mortgage was paid off at maturity.

The running expenses were as follows: clerk hire, $1,500; office expenses, $1,000; allowances to officers, $3,000; trustee's commissions, $3,000.

On February 1, 1907, the trustee surrendered charge of the company's offices and paid over the cash balances in his hands. On said date there were also uncollected book debts amounting to $2,000, and merchandise stock, $8,000.

Prepare a realization and liquidation account, a trustee's cash account, and a balance sheet of the estate at termination of trust.

PROBLEM XXVII

From the New York C. P. A. Examination of June, 1912. (See Chapter XL.)

The following is the trial balance of the Rawdeal Com-

pany, June 1, 1911, on which day the directors of the company resolve that the secretary of the company be authorized to call a meeting of the stockholders, to vote on the immediate dissolution of the company:

Land	$15,000.00	Bond Secured by Mortgage*—6%	$26,000.00
Building and Realty Fixtures	40,000.00	Interest Accrued on Bond Secured by Mortgage	312.00
Machinery and Machine Tools	35,000.00	Accounts Payable	21,700.00
Shop and Hand Tools (in store)	5,000.00	Reserve for Depreciation of Building	5,300.00
Furniture and Personalty Fixtures	9,700.00	Reserve for Depreciation of Machinery	8,000.00
Raw Materials and Freight thereon	10,350.00	Reserve for Depreciation of Furniture and Fixtures	5,100.00
Accounts Receivable	23,400.00	Surplus	23,358.00
Cash in Bank and in Offices	11,320.00	Capital Stock, Authorized, Issued and Outstanding	60,000.00
	$149,770.00		$149,770.00

*Building and realty fixtures pledged thereunder.

The stockholders' meeting was held on July 1, 1911, and the dissolution took place. The company sold the building and its equipment to the mortgagee for $34,000 as of August 15, 1911. On September 1, 1911, the cash book showed:

Debits:

Building and realty fixtures, $7,454; machinery, $25,340; shop and hand tools, $2,100; furniture and fixtures, $3,700; raw materials, $7,950; accounts receivable, $23,130.

Credits:

Accounts payable, \$21,700; expenses, \$1,530.20.

Prepare:

1. The journal entries affecting the dissolution of the company.
2. A statement of realization and liquidation that will show the per cent received by the stockholders on their holdings.

PROBLEM XXVIII

Based upon the same principles as the preceding problem. From the New York C. P. A. Examination of January, 1913. (See Chapter XL.)

James Stetson is appointed trustee of the manufacturing business of John Brightlawn, for the purpose of rehabilitation. On taking charge he finds that the available assets are: cash in bank, \$356; accounts receivable: (a) good, \$3,712; (b) probably uncollectable, \$350. The working and trading assets consist of raw materials, \$17,258; sundry manufacturing supplies, \$700; finished goods, \$8,000; goods in process, \$30,945.70. Other assets comprise: machinery and machine tools, \$41,000; shop and hand tools, \$1,300; deferred debits to manufacturing, \$530. The liabilities are as follows: creditors' accounts, \$39,700; wages accrued: productive, \$500; unskilled, \$230.

The transactions under the trusteeship are as follows: Loaned by creditors for immediate needs, \$7,000. Purchased on book accounts: raw materials, \$8,300; sundry manufacturing supplies, \$9,500. Factory expense: paid in cash, \$1,300; incurred as a liability to creditors and subsequently liquidated, \$2,100. The doubtful accounts receivable proved worthless. Cash paid for: productive labor,

$16,000; unskilled labor, $2,500; general expense, $8,000; additional shop tools, $609; freight inward, on raw materials manufactured and sold, $60. Interest allowed to creditors on their accounts amounted to $143.10. The trustee advanced $4,300 to John Brightlawn on account of expected profits; the sales of finished goods amounted to $91,000.

At the close of the trusteeship, the trustee's books show the working and trading assets to be: finished goods, $11,000; goods in process, $10,450; raw materials, $1,945.70; manufacturing supplies, $395.25. There is besides an amount of $750.10 representing factory expenses unapplied. The creditors' accounts show a balance of $1,650.30, while the uncollected accounts receivable amount to $2,975.36. The shop and hand tools amount to $1,609.

Prepare an account which, while respecting the fiduciary character of the relations of the trustee and of the proprietor of the business, will reflect logically and clearly the result of J. Stetson's administration.

PROBLEM XXIX

To introduce the legal requirements of the bankruptcy schedules. (See Chapter XXXIX.)

On July 1, 1916, John Doe petitions the Court, asking to be adjudged a voluntary bankrupt. The facts embodied in the required schedules which he presents to the Court are as follows:

Statement showing trial balance of the books of John Doe at June 30, 1916, and the estimated worth of assets:

Assets

	Trial Balance	Estimated Worth
Cash on Hand	$1,000.00	$1,000.00
Cash in Banks	5,830.40	5,830.40
Accounts Receivable	42,540.20	35,000.00
Land and Building	60,000.00	50,000.00
Machinery and Machine Tools	31,500.00	15,000.00
Shop Tools	3,700.00	1,100.00
Notes Receivable	5,000.00	5,000.00
Furniture and Fixtures	4,000.00	1,900.00
Patents	10,000.00	3,000.00
Stationery and Printing (books of account and records in use)	380.00	380.00
Transportation Equipment	2,350.00	1,500.00
Materials and Supplies	17,000.00	9,000.00
Goods in Process (materials only)	39,700.00	22,000.00
Finished Goods	21,500.00	20,000.00
Wages	11,150.40	
Selling Expense	3,100.00	
Factory Overhead	2,150.00	
General Administration Expense	7,930.00	
	$268,831.00	$170,710.40

Liabilities

	Trial Balance
Capital and Profits	$60,500.00
Mortgage Payable, December, 1916	40,000.00
Accounts Payable	137,975.60
Wages Payable	3,150.40
State Taxes Due	205.00
Notes Payable	19,000.00
Reserve for Depreciation of Machinery and Tools	5,000.00
Reserve for Depreciation of Building	3,000.00
	$268,831.00

Inventory of the personal property and debts of John Doe at June 30, 1916:

Stock—25 shares of Mexican Mines—market value	$1,000.00
(Par value, $50.)	
Household Furniture:	
Kitchen Utensils, estimated worth	150.00
Other Furniture, estimated worth	1,500.00
Library, estimated worth.	400.00
Wearing Apparel—including S. N. G. uniforms and equipment	580.00
Jewelry, estimated worth.	250.00
Cash in House	75.00
Cash in Bank	1,210.00
Saddle Horse and Equipment, estimated worth.	395.00
	$5,560.00

Due for Rent—K. Ostengo.	$200.00
Due for Groceries—J. Albrecht	50.00
Due for Meat—P. Sohmer.	25.00
Due for Wearing Apparel—S. Trotter	75.00
Due to Clubs, for Membership	80.00
Due to Housekeeper, wages 1 month	50 00
Due to Valet, wages 1 month	50.00
Due to City Stables, keep of Saddle Horse	65.50
	$595.50

John Doe discounted in June, 1916, $4,000 of notes due August, 1916, and indorsed two notes of B. Burns, amounting collectively to $800, due September, 1916.

Required:

Summary of debts and assets to be submitted to the Court, made in accordance with requirements prevailing in such cases.

PROBLEM XXX

To introduce the theory of the accounts of executors. (See Chapter XLI.)

M. T. Fordham's will named A. Abner as his executor. Fordham died May 1, 1916; his will was duly probated, and on May 10, 1916, the Court issued to A. Abner letters testamentary. Prior to the receipt of said letters, Abner paid $475 for the funeral expenses of the deceased.

Soon after qualifying as executor, Abner filed with the Surrogate of the County of New York the following inventory of the assets, established as of May 10, 1916:

1st Mortgage, 6%, due July 10, 1916, on Land and Building of S. Turner, which is located at 181st St., Bronx	$5,000.00
Interest accrued thereon	250.00
Note Receivable, J. Simpson, dated March 26, 1916, due May 25, 1916, bearing interest, indorsed by J. Spruce	1,100.00
Cash in U. S. Mortgage & Trust Company	500.00
Cash in Dime Savings Bank	110.20
Insurance Policy, New York Life Insurance Company (payable to estate)	1,000.00
Salary due M. T. Fordham by Browner & Simplex	350.00
50 shares of capital stock of the Bacillac Company, par $100 (worth par)	5,000.00
Personal Wearing Apparel and Jewelry (appraised)	300.00
Total	$13,610.20

The debts amounted to:

Due for Rent of Apartment	$80.00
Due to T. B. Roe, M.D.	210.00
Due to Universal Pharmacy	31.50
Due to Miss Spence, trained nurse	150.00
Total	$471.50

The expenses incident to the death and burial of the testator were:

Funeral Expenses	$475.00
Legal Expenses in connection with Probate, etc	150.00
Total	$625.00